ACIDUM PHOSPHORICUM URINAE ET EXCREMENTORUM.

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HALIS SAXONUM,
TYPIS EXPRESSUM GEBAUERIO-SCHWETSCHKIANIS.

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PATRI OPTIMO

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OFFERT

FILIUS.

Acidi phosphorici ex organismo secretio quibus modis fiat et quas leges sequatur perspicere haud dubie quum phisiologorum tum medicorum plurimum interest. Et multi sane tentarunt, ejus secretionis rationes per experimenta subtiliter instituta cognoscere; verum obstitit praeter ipsius accuratae definitionis difficultatem altera certae methodi in analysi quantitativa.

De Liebig primus methodo sua per se acuta docuit, ferro sesquichlorato [1]) acidi phosphorici urina contenti quantitatem definire. Ea methodus multis arrisit, ut plurima experimenta secundum eam fierent, inter quae memoria dignissima, quae Breed [2]), Aubert [3]), J. Vogel [4]), A Winter [5]), F. Mosler [6]), Lehmann [7]), alii instituerunt, donec C. Neubauer et J. Vogel demonstrarent, eam methodum vel accuratissime operantibus appropinquantes tantummodo rationes indicare. C. Neubauer [8]) analyticis documentis demonstravit, permultos in ea methodo esse vitiorum fontes, gravissime autem eam flaccere ab inconstantia praecipitati Ferri oxydati phosphorici, quippe quod in solutione supervacanei ferri valde inclinet ad transitum in connubia magis basica; itaque fieri, ut exigua quantitas supervacanei Ferri oxydati ad gignendam reactionem finalem addita cito ex liquore rursum excernatur; quod incommodum magna copia liberi Acidi acetici minui dumtaxat posse, non penitus tolli. Quibus ex causis justus terminus titrationis, quae fit Ferro sesquichlorato, non solum observatu difficilis, sed omnino incertus apparet. Ut Dr. J. Vogel monet, facile decem centesimis erratur, praecipue in urinis Acido phosphorico pauperibus. Idem conclusiones ex inquisitionibus

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1) De methodo in titratione Ferro sesquichlorato instituenda v. Analyse des Harns von Dr. C. Nenbauer u. J. Vogel. 3. Aufl. p. 161.

2) Annal. d. Chem. u. Pharm. vol. 78. p. 150.

3) Henle u. Pfeufer's Zeitschrift für rationale Medicin 1852. II. 3.

4) Anal. d. Harns. p. 342.

5) A. Winter, Beiträge zur Kenntniss der Urinabsonderung bei Gesunden. Diss. inaugur. Giessen 1852.

6) F. Mosler, Beiträge zur Kenntniss der Urinabsonderung bei gesunden, schwangeren und kranken Personen. Diss. inaug. Giessen 1853.

7) Lehmann, Physiologische Chemie. vol. 3.

8) Beiträge zur Harnanalyse von Dr. Neubauer im Archiv des Vereins für gemeinschaftliche Arbeiten zur Förderung der wissenschaftlichen Heilkunde von Dr. J. Vogel, H. Nasse u. F. W. Beneke. vol. 4. fasc. 2.

ejus generis facere dissuadet, nisi si differentiae triginta centesimis majores sint repertae; differentias inter quindecim centesimas et triginta versantes solummodo in inquisitionibus admodum numerosis respiciendas esse [9]).

Elucet igitur, nullum esse usum methodi illius, quam de Liebig proposuit, nisi ad approximativam terminationem Acidi phosphorici in urina extantis; et summopere hoc expetendum fuisse omnibus medicis, quibus scientia interiorum rationum artis suae cordi esset, ut certior aliqua methodus in quantitate Acidi phosphorici determinanda haberetur.

Jam anno 1852 Leconte [10]) primus Uranium oxydatum in usum vocare suasit; sed ea propositio neglecta fuit, donec anno 1856 eam methodum jam oblivione obvelatam A. Arendt et W. Knop [11]) accurato examini per analysin ponderativam subjecerunt, ex quo apparuit, Uranium oxydatum aceticum egregium esse medium ad determinandam analysi ponderativa quantitatem Acidi phosphorici. Dr. C. Neubauer [12]) denique anno 1859 detexit, Uranium oxydatum aceticum pariter ad determinandum Acidum phosphoricum analysi mensurativa admodum idoneum esse, praecipue in urina, publicavitque experientias a sese ea de re factas, et ita simul novam methodum dudum desideratam determinandae quantitatis Acidi phosphorici in urina obvii tradidit.

Quoniam autem methodus titrandi Uranio oxydato acetico ad determinandam quantitatem Acidi phosphorici in urina etiamnum nova est, neque, quod ego sciam, inquisitiones in hoc genere sunt institutae praeter eas, quas ipse Dr. Neubauer et ejus instinctu Siebold pharm. stud. fecerunt: hoc propositum est meae dissertationi, ut quam plurimae fieri possent inquisitiones instituerentur secundum methodum novam, pro certa commendatam, ut inter se compararentur quae hac methodo essent reperta et quae veteriore Liebigiana, atque ut sic aut ea, quae adhuc de secretione Acidi phosphorici per urinam tradita sunt, confirmarentur, aut dubiam etiamnum esse nostram ea de re scientiam demonstraretur. Jam ne quid deesset ab inquisitionibus secundum veterem methodum institutis, atque ut comparationes diversas in partes fieri possent, non solum in quantitatem Acidi phosphorici inquisivi in urina sanorum aeque hominum ac morbis acutis et chronicis laborantium, sed etiam certior fieri studui, quatenus in quantitate Acidi phosphorici, quam urina contineret, alimenta, potiones, mera salia phosphorica, alia operarentur. Sed in his observationibus de physiologicis fluctuationibus quantitatis Acidi phosphorici urina contenti consideranti mihi, excretionem Acidi phosphorici neutiquam posse solummodo pendere ex quantitatibus recta ingestis in organismum, sed eam excretionem, pariter ac de Chloro evidenter, de Acido sulfurico probabiliter demonstratum est, multis mutationibus in interna transubstantiatione procedentibus regi ac temperari, hoc quoque consilium fuit, ut ex aucta aut minuta excretione

9) Dr. J. Vogel u. C. Neubauer, Harnanalyse. p. 338.

10) Jahresbericht von v. Liebig u. Kopp. 1853. p. 642.

11) Chemisches Centralblatt 1856. p. 769 u. 803. — 1857. p. 177.

12) Beiträge zur Harnanalyse von Dr. C. Neubauer im Arch. z. Förd. d. wissensch. Heilk. vol. 4. fasc. 2. p. 229 sqq.

Acidi phosphorici post physiologicas fluctuationes de industria excitatas probabile certe facerem, in transubstantiatione efficaciam quandam regulatoriam inesse. Simul respexi, excretionem per renes haudquaquam posse totam excretionem Acidi phosphorici ex organismo complecti, verum praeter alia secreta et excreta faeces quoque salia phosphorica continere certo suspiciendum esse. Sed studio literarum in hac materia versantium certior factus sum, inquisitiones in solida excrementa quidem jam exstare, et eas haud parvi faciendas, quas Berzelius, Wehsang et Ihring [13]) instituerunt: sed eas inquisitiones praeter aliarum substantiarum demonstrationem solummodo circa Calcariam Magnesiamque phosphoricas faecibus contentas versari, scientiam igitur de Acidi phosphorici excretione nobis traditam, utpote ad solam urinam pertinentem, rei minime sufficere. Quanta autem debet esse gravitas hujus quaestionis, annon faecibus multo plus Acidi phosphorici ex corpore excernatur quam urina, et quae sit media ratio inter quantitates Acidi phosphorici in faecibus et in urina! Etiam si reperta minore quantitate Acidi phosphorici in faecibus intacta permaneat scientia de Acidi phosphorici per urinam excretione doctrinae de interna transubstantiatione inserta, certe illa quaestio physiologis, medicis theoreticis, et ipsis therapeutis pathologisque practicis summopere cordi esse debet.

Itaque mihi incitato ad examinandam illam quaestionem a praeceptore summe venerando, Ill. J. Vogel, cui plurimum me debere profiteor, utpote qui mihi liberum usum apparatuum chemicaliumque suorum liberaliter concesserit, nec non materiam pathologicam nosocomii sui benigne obtulerit, et cujus ope ac consilio ego adjutus omnino hasce studiorum meorum qualescunque primitias perficere potuerim, hoc potissimum erit propositum, ut quantitatem Acidi phosphorici in excrementis et rationem quae inter hanc et quantitatem in urina obviam intercedat, determinare studeam.

Jam autem ante quam experimenta mea componam, in animo est dare conspectum modi, quo nova methodus quantitatem Acidi phosphorici in urina determinat, nec non ejus viae, quam ad constituendam Acidi phosphorici in faecibus quantitatem ipse secutus sum.

Ac principium quidem novae methodi ad determinandam Uranio oxydato acetico Acidi phosphorici in urina quantitatem hocce est. Dr. C. Neubauer [14]) reperit, si aestuans solutio salis alicujus phosphorici aqua vel Acido acetico solubilis, exstante libero Acido acetico, solutione Uranii oxydati acetici misceatur, continuo absolutam praecipitationem Uranii oxydati phosphorici fieri. Uranium oxydatum phosphoricum secundum illius indicium constat ex viginti centesimis Acidi phosphorici, octoginta Uranii oxydati, sedimentum format ex albo luteolum subvirescens, aqua vel Acido acetico insolubile, sed acidis mineralibus solubile, quibus ex solutionibus Ammonii acetici nimietate rursum prae-

13) Diss. inaug. Giessen 1852—53.

14) Beiträge zur Harnanalyse im Archiv z. Förd. d. wissensch. Heilk. vol. 4. fasc. 2.

cipitatur. Porro conditione est mucosa et non prorsum facile considit. Quam ob rem quum absolutio reactionis ex praecipitatione subtiliter observari non possit, ut appareat, sitne omne Acidum phosphoricum praecipitatum, exigua nimietas Uranii oxydati addenda est, quae quidem reactione mirum quam subtili salium Uranii oxydati adversus Kalium ferrocyanatum detegitur. Notum est enim, solutiones salium Uranii oxydati vel uberrime dilutas Kalio ferrocyanato examinatae sedimentum rubrum exhibent, saturo colore pro saturitate solutionis Uranii oxydati acetici. Ex coloris igitur in praecipitato saturitate ad judicium de quantitate supervacanei Uranii oxydati appropinquatur. Quum autem Kalium ferrocyanatum facere non possit quin Uranium oxydatum phosphoricum disjungat, ad obtinendam reactionem finalem illud fluido de Acido phosphorico in examen vocato non recta addendum est, sed praecipiente Dr. C. Neubauer ita agendum, ut in titratione quae fit Ferro sesquichlorato: gutta igitur mixturae immittenda duplicatae chartulae bibulae, et haec apprimenda chartae Kalio ferrocyanato imbutae et in candida lamina porcellanea collocatae, quo facto macula e rubro fuscescente, quae oborietur in charta inferiore, finis reactionis indicabitur. Dr. C. Neubauer ipse concedit, hanc methodum reperiendi finis reactionis subtilitate multo inferiorem esse ea, qua reactio finalis in ipso liquore manifesta appareat. Equidem experimentis ea de re factis edoctus sum, acumen reactionis illo modo ita obtundi, ut minimae portiones supervacanei Uranii exydati nequaquam certo agnosci possint. Praeterea ob necessarios processus endosmoticos et chemicos semper satis diuturna observatione opus est, donec manifesto colore proveniente de reactione finali certi fiamus. Quam ob causam quum meditarer, quo artificio ei incommodo occurreretur, prope manus esse visum est, subtilitatem reactionis ita servare, ut guttae liquoris de Acido phosphorico examinandi radio vitreo in candidam laminam porcellaneam instillatae e vase solutionem Kalii ferrocyanati continente gutta contraria addatur. Ita reactio finalis continuo manifesta fit, variae luces rubri praecipitati clarissimae et purissimae apparent, unde certo cognoscitur, sitne minima an nimia portio supervacanei Uranii oxydati acetici addita.

Quod attinet ad specialem praestantiam certitudinis, qua methodus Neubaueriana veterem Liebigianam superat, ea in hoc ipso sita est, quod Uranium oxydatum phosphoricum non aeque ac Ferrum oxydatum phosphoricum inconstanti conjugio ligatur, sed etiam in liquore, qui quam paucissimum supervacaneum Uranium oxydatum contineat, sibi constans permanet. Urinam et solutiones faecium Uranio oxydato mixtas per complures dies reservavi, neque unquam nota reactio finalis adhibito Kalio ferrocyanato defuit. Neque alia inest in urina normali et in faecium solutionibus, quae Uranio oxydato acetico praecipitetur. Quodsi enim Acido phosphorico ex his liquoribus Magnesia exterminato post viginti quatuor horas colatur, Acidum aceticum usque ad aciditatem additur ac denuo solutione Uranii oxydati examinatur, liquores Acido phosphorico privati prorsum nulla turbatione afficiuntur.

Denique ad exsequendam methodum titrandi Uranio oxydato acetico postulatur solutio Acidi phosphorici, cujus proportio sit nota, et

solutio Uranii oxydati acetici. Dr. C. Neubauer suam solutionem Acidi phosphorici ita instituit, ut mediae proportioni Acidi phosphorici in urina obvenientis respondeat. Quum igitur viginti quatuor horarum spatio ab homine sano media ratione in urinae centimetris cubicis mille et quingentis terna grammata Acidi phosphorici evacuentur, solutioni Acidi phosphorici convenientem dedit tenorem duarum centesimarum, ut quinquaginta centimetra cubica responderent uni decimae grammatis Acidi phosphorici. In universum autem nihil refert, quae sit saturatio solutionis Acidi phosphorici, quum res in hoc solummodo versetur, ut ad ejus solutionis normam vis praecipitandi in Uranio oxydato acetico determinetur. Ego in omnibus experimentis usus sum solutione Acidi phosphorici, cujus litra 2,500 grammata, 50 centimetra cubica 125 millegrammata, 10 centimetra cubica 25 mgr. et unum cm. c. 2,5 mgr. Acidi phosphorici continebant. Bene agitur, si solutionis Acidi phosphorici satis paratur, ut novae solutiones Uranii oxydati acetici, quas usus postulet, protinus ex tenore solutionis Acidi phosphorici temperari possint. Solutio Acidi phosphorici noto tenore ita paratur, ut Acidum phosphoricum in solutione Natri phosphorici per frigus satiata praecipitando Magnesia bis determinetur analysi ponderativa, ambarumque determinationum medium pro rato accipiatur. Ad conficiendam solutionem titratam Uranii oxydati acetici venale purum Uranium oxydatum [15]) Acido acetico solvatur, solutio aqua destillata diluatur, et efficacia dilutae ad solutionem Natri phosphorici noti tenoris constituatur. Eum ad finem decem centimetra cubica solutionis Natri phosphorici exacte mensurentur tubulo vitreo, in calicem vitreum immitantur, aliquot guttae Natri acetici adduntur. Agitatis radiolo vitreo ex buretta Uranium oxydatum aceticum lento flumine immittatur. Simul ac praecipitatum non jam augeri videtur, incipiatur ad descriptam methodum in lamina porcellanea reactionem finalem experiri, et pergatur per dimidia centimetra cubica eximinando, donec reactio finalis appareat. Quot centimetra cubica Uranii oxydati acetici consumta fuerint, totidem nostro in casu ad praecipitanda 25 millegrammata Acidi phosphorici et ad excitandam manifestam reactionem finalem sufficient.

Dr. C. Neubauer ad determinandam quantitatem Acidi phosphorici titrata solutione Uranii oxydati acetici utitur, cujus est ea temperatio, ut ejus singula centimetra cubica 0,005 grammatis Acidi phosphorici, proinde viginti centimetra cubica 0,1 grammatis Acidi phosphorici praecipitent. Pariter atque in solutione Natri phosphorici, cujus nota est proportio, etiam in titratis solutionibus Uranii oxydati acetici nihil quidem refert, quae sit earum saturatio; sed tamen mihi compertum est, saturatiores solutiones eo esse magis idoneas, quod non nimias quantitates ad praecipitationem nec nimium temporis ad repetendam rursum et rursum instillationem Uranii oxydati acetici postulant. Ego in experimentis meis varias solutiones adhibui, quarum praecipitabant:

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15) Uranium oxydatum paratur ex Ochra Uranii, Mica Uranii, Johannite etc. Cf. de hac re copiosiores chemicorum libri, e. g. Fresenius Quantitative Analyse, ed. 4. p. 103. Wöhler, Chemische Analyse p. 141.

6,5	centimetra	cubica	Ur. 2 O_3 $\bar{A}$	—	10 cm. c.	2 Na O HO PO_5.
8,5	„	„	„	—	„	(25 mgr. PO_5)
10,5	„	„	„	—	„	„
40	„	„	„	—	„	„
20	„	„	„	—	„	„

In determinanda quantitate Acidi phosphorici urina contenti diversum a methodo Neubaueriana, secundum quam certa quantitas (50 cm. c.) urinae colatae in aqua ad 90 vel 100° calefit, ac multo commodiorem modum usurpavi. Observaveram enim in experimentis meis, Acidum phosphoricum etiam ex frigidis liquoribus Uranio oxydato acetico omne praecipitari, et interdum tantum reactionem finalem rursus evanescentem apparere, scilicet si properantius examinatur antequam conjunctio chemica inter Acidum phosphoricum et Uranium oxydatum aceticum confecta est. Ex omnibus autem experimentis compertum est, reactionem semper constantem manere, etiamsi per complures dies stetissent liquores Uranio oxydato acetico mixti, simulac reactio finalis perdurabat, postquam sedimentum Uranii oxydati phosphorici in liquore ortus omne consederat et fluidum liquiduis, perspicuum, Acido phosphorico privatum supra sedimentum mucosum ex albo luteolum constiterat. Ea experientia nisus omnia experimenta in urina non calefacta feci. Urinae examinandae dena centimetra cubica accurate emetiebar, non colabam, nisi si turbationes apparerent, e. g. ex salibus acidi urici, quo colorem cognoscerem, mensurata decem centimetra urinae in calicem vitreum immittebam, aliquot guttas saturatae solutionis Natri acetici addebam, radiolo vitreo agitabam, tum e buretta non amplius agitans titratam solutionem Uranii oxydati acetici per parietem vasis lento flumine demittebam, donec orientes nubeculae ex albo virentes non augerentur, ac tum examen reactionis finalis suscipiebam, antea denuo liquore graviter agitato. Quodsi in lamina porcellanea vestigium reactionis finalis non apparebat, denuo e buretta guttatim addebam, et per singula semicentimetra cubica periculum repetebam. Si tandem reactio finalis eadem coloris specie, qua solutio Uranii oxydati acetici titrata erat, apparebat, liquorem intactum sinebam, primo post longius temporis spatium, serius certior ea in re, simul ac sedimentum consederat, id quod brevi tempore fit, experimentum repetebam, et si tum quoque reactio finalis apparebat, examen finitum erat. De reactione finali etiam moneo, certo cuidam coloris gradui, et quidem ei, qui in titratione solutionis Uranii oxydati acetici apparet, inhaerendum esse. De Liebig concinne notat, exiguam nimietatem Uranii oxydati acetici in liquore examini indici librae, tincturam e rubro fuscam ejus momento aequabilem esse. Si jam ad languidum, jam ad vividum usque colorem additur, differentiae haud leves in tenore Acidi phosphorici obtruduntur. Non immemor admonitionis Liebigianae ego levissimam, sed tamen manifestam rubellam tincturam indicium absolutae praecipitationis Acidi phosphorici semper habui.

Quantitas consumtae solutionis Uranii oxydati acetici denique in buretta scriptulis subtiliter divisa cernebatur et inde ratio Acidi phosphorici decem centimetris contenti ducebatur, unde ejus quantitas in universa copia urinae contenta et proinde, quae certis temporis spatiis excerneretur, facile eruebatur.

In determinanda urinae quantitate eodem modo operabar ac Dr. A. Winter [17]). Urina viginti quatuor horarum in tres portiones diligentissime colligebatur. Primam portionem dico urinam nocturnam, eam, quae ab hora sexta vespertina ad octavam usque matutinam reddebatur; altera portio, urina matutina, eam complectitur, quae ab hora octava ad primam usque meridianam evacuabatur; tertia denique portio, urina meridiana, quod per reliquum diei tempus mejebatur usque ad horam sextam. In exploranda mea urina ab indicata via eo declinavi, quod eam post unam quamque secretionem Acidi phosphorici gratia examinabam, quo certior fierem de proportione Acidi phosphorici per horas fluctuante. Sed tamen omnes portiones statim post secretionem exploratas, quatenus id fieri posset, sub illam diei divisionem redigebam. Singulae portiones ceterum in vase vitreo secundum centimetra c. diviso accurate mensurabantur, et earum computatione universa quantitas urinae viginti quatuor horarum noscebatur. Pondus specificum, ubicunque id fieri poterat, subtili araeometro determinabatur. Saepe quidem quantitates urinae collectae tam exiguae erant, ut araeometrum immergi non posset, unde multae lacunae in tabulis infra accessuris obviae originem habent. Praeterea in determinatione Acidi phosphorici etiam aliarum qualitatum, quas quaeque urina portio exhiberet, ratio habebatur; color ubique, et quidem in turbidis urinis post colationem, secundum scalam chromaticam Ill. Vogel definiebatur, porro reactio et species, turbida an liquida etc. notabantur.

Jam quod attinet ad determinandas quantitates Acidi phosphorici excrementis contenti, hac via procedebam.

Faeces quotidianas vel quadraginta octo horis a me evacuatas scrupulose colligebam in ollis ad eum usum comparatis, lotium simul redditum aliis vasis excipiebam. Deinde excrementa sufficiente copia aquae destillatae commiscebantur; postea aquam communem adhibebam, postquam certior factus sum, nullum inesse Acidum phosphoricum. Ea mixtura radio vitreo probe agitabatur, exigua quantitas Acidi nitrici, major solutionis Aluminis, quo melius colatio cederet, addebantur. Soluta excrementa stabant viginti quatuor vel triginta sex horas, per quod tempus subinde denuo agitabantur. Eo temporis spatio plerumque duo strata in vasis excrementa continentibus discedebant, alterum crassius luteolum, quod fundum petebat, alterum liquidius, magis perspicuum, pigmentum elutorum excrementorum continens. Post viginti quatuor vel triginta sex horas tubulo vitreo de strato superiore accurate quinquaginta vel octoginta centimetra cubica demebantur et in filtrum immittebantur. Reliqua pars vase vitreo ad centimetra cubica exacte diviso mensurabatur, ambarumque portionum summa notabatur, qua excrementa aqua, Acido nitrico et solutione Aluminis soluta indicabantur. Deinde

17) Beiträge zur Kenntniss der Urinabsonderung bei Gesunden. Giesen.

color colatarum solutionum excrementorum secundum scalam urochromaticam observabatur, et de colatura exacte vicena centimetra cubica ad determinandam quantitatem Acidi phosphorici mensurabantur. Ea vicena centimetra satis saturata solutione Natri acetici non parce miscebantur et e buretta solutio Uranii oxydati acetici caute addebatur. Quo facto quamquam color solutionum excrementorum fulvus vel in rubrum transiens ex Uranio oxydato acetico continuo pallescebat, tamen subrutila quaedam species remanebat, admodum incommoda examinationi de nota illa reactione finali. Itaque diversis viis ad certam et manifestam reactionem finalem pervenire tentavi. Pigmentum colatae solutionis excrementorum omne me ligaturum sperabam, si ad methodum Liebigianam de mixta excrementorum solutione aliquot guttas duplicatae chartae colatoriae immitterem, eamque laminae Kalio ferrocyanato imbutae apprimerem. Verum etiamsi solutiones excrementorum ita bis colatae plus etiam coloris exuebant, incommoda hujus reactionis finalis supra incusata multo graviora proveniebant. Porro tentavi, ut duplices conditiones endosmoticas tollendo proventum reactionis finalis accelerarem, pigmentum simpliciter ita ligare, ut in parva infundibula ex charta colatoria facta ope radii vitrei complures guttas solutionis excrementorum immitterem, in laminam porcellaneam guttam solutionis Kalii ferrocyanati instillarem, apicemque infundibuli parvae huic maculae Kalii ferrocyanati immergerem. Sed nec hoc quidem modo reactio finalis semper manifestior et certior evadebat, quum infundibula haud facile tam arcta fierent, ut non una vel alia gutta solutionis excrementorum maculae Kalii ferrocyanati misceretur, quae parietes infundibuli non penetrasset. Post varia alia experimenta denique didici, subtilissimam et apertissimam reactionem finalem apparere, si binas guttas solutionis faecium inter se distantes in laminam porcellaneam ferebam, alteram radio vitreo expandebam, quo facto residuus color colatae solutionis excrementorum paene funditus extinguebatur, ac tum huic maculae Kalium ferrocyanatum addebam. Vel minima parte Uranii oxydati acetici supervacanea continuo rubor apparebat viridior quam in altera gutta intacta. Hoc igitur modo reactionem finalem in omnibus experimentis de quantitate Acidi phosphorici in faecibus exstantis examinavi. In his quoque inquisitionibus cognovi, si reactio finalis etiam tum apparebat, postquam praecipitata ex Uranio oxydato acetico prorsum consederant, novae examinationi, postquam mixtae solutiones per complures dies steterant, semper occurrere notam reactionem finalem Sedimenta in solutionibus faecium ex addito Uranio oxydato acetico orientia easdem quidem semper habent qualitates, sed differentes a sedimentis urinarum eo, quod manifestas nubeculas non formant, colore sunt e luteo rubescente, et micis aut granulis considunt. Supra sedimenta non aliter atque fit in urinis solutio faecium pellucidior, Acido phosphorico destituta colligitur. Quantitas Acidi phosphorici computatione ut in urinis facile constituebatur. Primo propositum habebam, de qnantitate Acidi phosphorici etiam in faecibus aegrotorum experimenta instituere; sed quoniam nimius is labor fuisset, eas explorationes in serius tempus distuli, duobus quidem experimentis, de quibus infra sermo erit, in aegroto homine jam factis.

Postquam illa de examinandi methodis relata sunt, jam ad componendas ipsas inquisitiones transeo; ac primum experimenta de quantitatibus Acidi phosphorici urina contentis praemittam, tum ex his observationibus conclusiones deducam, ac denique inquisitiones in quantitates Acidi phosphorici in faecibus obvias subjungam ejusque rei summam cum illa comparabo.

Experimenta proxima in mea ipsius urina feci, et quidem post unam quamque secretionem. Priusquam ea experimenta proferam, ex re videor facere, si de corpore meo et vitae conditionibus quaedam praemitto.

Natus sum annos septem et viginti, corporis statura utor compacta et robusta; corpus meum (cum vestimentis) pondus habet librarum $147\frac{1}{2}$, amplitudo respirationis est centimetrorum cub. 3050. Urina explorata est a quarto die Aprilis usque in finem ejus mensis; inter postrema experimenta, quo majores fluctuationes physiologicas observarem, Natrum phosphoricum sumsi in dosibus subtiliter expensis, crescentibus, et per cursum experimentorum, ut uno quoque loco id memorabitur, cerevisiae ubertate et alimentis duplis proteina divitibus usus sum. De reliqua vitae conditione, praecipue quae observata est per tempus experimentorum, haec communicari possunt.

Sexta hora omni mane surgo, aliquot calices infusi coffeae sumo; tum per tempus experimentorum usque ad horam primam meridianam operibus chemicis occupabar, inter quae nosocomia etiam frequentabam. Hora prima quotidie coenam capio, quae constat ex jusculo, olere, carne elixa et assa cum aliqua re condimentaria. Statim post coenam probe deambulo et unam vel duos calices coffeae sumo. Circa quartam horam ad occupationes spirituales revertebar vel experimenta continuabam usque sub horam septimam. Eo tempore coena vespertina succedit, quae constat ex pane cum butyro et carne vel caseo, quibus sociantur aliquot parvi cyathi tenuis cerevisiae domesticae, vel aliquot calices infusi theae vel potionis de cacao; deinde vel occupationes spirituales rursum suscipiebam, vel in hospitium devertebar ibique aliquot ollulas cerevisiae bibebam.

D. 4. m. April [1]). (Duplex nutribilis victus).

Urin. matut. Port. 2. PO^5 in toto 736.

a) hor. 8 — ½11.
Qualit. urin. clara, acida, color. subflav.
Quant. 320. Pond. spec. $1007\frac{1}{2}$.
PO^5 in 1000 part. 2,300.

b) hor. ½11 — 1.
Qual. urin. clara, acida, color. flav.
Quant. 100. Pond. spec. $1013\frac{1}{2}$.
PO^5 in 1000 part. 1,900.
„ in toto 190.

1) Explicatio abbreviationum.
Mensura quantitatis Ccm. facta est.
Acidum phosphoricum Grm. computatum est.
Nomina colorum sunt:
languide flavus = blassgelb,
subflavus = hellgelb,
e flavo rubescens = rothgelb,
e rubro flavescens = gelbroth,
urina colore exaltato = hochgestellter Urin.

Urin. noctur. (plures sextarii-cerevisiae).
Qual. Urin. clara, acida, col. lang. flav.
Quant. 620. Pond. spec. 1025.
PO^5 in 1000 part. 5,900.
„ „ toto 3,437.

Urin. merid. Port. 2.

a) hor. 1 — 4.
Qual. urin. clara, acida, habebat colorem inter flav. et e flavo rubesc.
Quant. 160. Pond. spec. 1018.
PO^5 in 1000 part. 3,200.
„ „ toto 512.

b) hor. 4 — $^3/_4$ 6.
Qual. urin. clara, acida, habebat colorem int. subflav. et flav.
Quant. 100. Pond. spec. 1021.
PO^5 in 100 part. 2,100.
„ in toto 210.

Tempore matutino.
Quant. 420.
PO^5 926.

Tempore pomeridiano.
Quant. 260.
PO^5 722.

XXIV horis.
Quant. 1300.
PO^5 5,085.
PO^5 in horam 211.

D. 5. m. Apr. (Iterum duppl. nutrib. victus).

Urin. matut.

Qual. urin. clara, acida, habebat col. int. lang. flav. et subfl.
Quant. 130. Pond. spec. 1015$^1/_2$.
PO^5 in 1000 part. 2,600.
„ „ toto 338.

Urin. noctur. Port. 2.

a) hor. $^1/_2$6 — $^1/_2$7.
Qual. urin. clara, acidula, col. lang. flav.
Quant. 80. Pond. spec. 1023.
PO^5 in 1000 part. 3,200.
„ „ toto 256.

b) hor. $^1/_2$7 — 8. (plures sextarii cerevisiae).
Qual. urin. clara, acida, col. subflav.
Quant. 950. Pond. spec. 1018.
PO^5 in 1000 part. 3,800.
„ „ toto 3,610.

Urin. merid. Port. 2.

a) hor. 1 — 3.
Qual. urin. clara, acida, habebat col. int. lang. flav. et subflav.
Quant. 400. Pond. spec. 1011.
PO^5 in 1000 part. 1,500.
„ „ toto 600.

b) hor. 3 — $^1/_2$6.
Qual. urin. clara, neutra, col. lang. flav.
Quant. 215. Pond. spec. 1019.
PO^5 in 1000 part. 1,900.
„ „ toto 408.

Tempore pomeridiano.
Quant. 615.
PO^5 1,008.

Tempore nocturno.
Quant. 1030.
PO^5 3,866.

XXIV horis. Quant. 1775. PO^5 5,212. PO^5 in horam 217.

D. 6. m. Apr.

Urin. matut. Port. 2.

a) hor. 8 — $^1/_2$12.
Qual. urin. clara, acida, col. lang. flav.
Quant. 215. Pond. spec. 1006$^1/_2$.
PO^5 in 1000 part. 1,200.
„ „ toto 258.

b) hor. $^1/_2$12 — $^3/_4$1.
Qual. urin. clara, acida, col. subflav.
Quant. 85. Pond. spec. 1016.
PO^5 in 1000 part. 1,500.
„ „ toto 127.

Urin. nocturn. Port. 2.
a) hor. $^3/_4$5—$^1/_2$7.
Qual. urin. clara, alcalina, color. lang. flav.
Quant. 60. Pond. spec. 1020.
PO^5 in 1000 part. 1,700.
„ „ toto 102.
b) hor. $^1/_2$7—8.
Qual. urin. clara, acida, col. e flav. rubesc.
Quant. 360. Pond. spec. 1030.
PO^5 in 1000 part. 6,900.
„ „ toto 2,484.
Urin. merid. Port. 2.
a) hor. $^3/_4$1—$^1/_2$4.
Qual. urin. clara, acida, col. subflav.
Quant. 220. Pond. spec. 1013$^1/_2$.
PO^5 in 1000 part. 2,300.
„ „ toto 506.
b) hor. $^1/_2$4—$^3/_4$5.
Qual. urin. clara, alcalina, col. subflav.
Quant. 160. Pond. spec. 1017.
PO^5 in 1000 part. 1,700.
„ „ toto 272.
Tempore matutino.
Quant. 300.
PO^5 385.
Tempore pomeridiano.
Quant. 380.
PO^5 778.
Tempore nocturno.
Quant. 420.
PO^5 2,586.

XXIV horis.
Quant. 1100.
PO^5 3,749.
„ in horam 156.

D. 7. m. Apr.

Urin. matut. Port. 2.
a) hor. 8—$^3/_4$9.
Qual. urin. clara, acida, col. e flav. rubesc.
Quant. 45. Pond. spec. vac.
PO^5 in 1000 part. 4,800.
„ „ toto 2,16.
b) hor. $^3/_4$9—11.
Qual. urin. clara, acida, col. flav.
Quant. 80. Pond. spec. 1023.
PO^5 in 1000 part. 2,900.
„ „ toto 192.
Urin. merid. 2. sextar. cerev.
hor. 11—$^1/_2$5.
Qual. urin. clara, acidula, col. subflav.
Quant. 400. Pond. spec. 1018$^1/_2$.
PO^5 in 1000 part. 2,600.
„ „ toto 1,040.
Urin. nocturn.
Qual. urin. clara, acida, col. subflav.
Quant. 600. Pond. spec. 1030.
PO^5 in 1000 part. 6,900.
„ „ toto 4,140.
Tempore matutino.
Quant. 125.
PO^5 408.
XXIV horis.
Quant. 1125.
PO^5 5,588.
„ in horam 232.

D. 8. m. Apr.

Urin. matut. Port. 2.
a) hor. 8—$^1/_2$11.
Qual. urin. clara, acida, color. subflav.
Quant. 125. Pond. spec. 1020.
PO^5 in 1000 part. 2,600.
„ „ toto 325.
b) hor. $^1/_2$11—1.
Qual. urin. clara, acida, color. subflav.
Quant. 140. Pond. spec. 1021.
PO^5 in 1000 part. 2,600.
„ „ toto 364.
Urin. merid. Port. 2.
a) hor. 1—$^3/_4$5 plures vini scyphi.
Qual. urin. clara, acidula, color. flav.
Quant. 290. Pond. spec. 1017.
PO^5 in 1000 part. 2,500.
„ „ toto 725.

b) hor. $^{3}/_{4}$5 — $^{1}/_{2}$6.
Qual. urin. clara, acidula, color. subflav.
Quant. 60.
PO^5 in 1000 part. 2,600.
„ „ toto 156.

Urin nocturn. Port. 2.

a) hor. $^{1}/_{2}$6 — $^{3}/_{4}$7. temporis vespertini.
Qual. urin. clara, acidula, color. subflav.
Quant. 80. Pond. spec. 1025.
PO^5 in 1000 part. 2,600.
„ „ toto 208.

b) hor. $^{3}/_{4}$7 tempor. vespert. — 8 tempor. matut. plur. sextar. cerev.
Qual. urin. clara, acida, habebat color. int. lang. flav. et subflav.
Quant. 950. Pond. spec. 1018.
PO^5 in 1000 part. 3,800.
„ „ toto 3,610.

Tempore matutino.
Quant. 265.
PO^5 689.

Tempore nocturno.
Quant. 1030.
PO^5 3,818.

Tempore pomeridiano.
Quant. 350.
PO^5 881.

XXIV horis.
Quant. 1645.
PO^5 5,388.
„ in horam 224.

D. 9. m. Apr.

Urin. matut. Port. 2.

a) hor. 8 — 10.
Qual. urin. clara, acida, color. flav.
Quant. 165. Pond. spec. 1016.
PO^5 in 1000 part. 2,300.
„ „ toto 379.

b) hor. 10 — 11. apud exonerationem alvi.
Qual. urin. clara, acida, color. subflav.
Quant. 70. Pond. spec. 1019$^{1}/_{2}$.
PO^5 in 1000 part. 2,309.
„ „ toto 161.

Urin. nocturn. plur. sextar. cerevis,
Qual. urin. clara, acida, habebat col. int. subflav. et flav.
Quant. 950. Pond. spec. 1022.
PO^5 in 1000 part. 2,900.
„ „ toto 2,755.

Tempore matutino.
Quant. 235.
PO^5 540.

XXIV horis.
Quant. 1185.
PO^5 3,295.
„ in horam 137.

D. 10. m. Apr.

Urin. matut. Port. 2.

a) hor. 8 — 10.
Qual. urin. clara, neutra, color. subflav.
Quart. 225. Pond. spec. 1012$^{1}/_{2}$.
PO^5 in 1000 part. 1,400.
„ „ toto 325.

b) hor. 10 — 1. sextar. cerev.
Qual. urin. clara, acidula, color. lang. flav.
Quant. 295. Pond. spec. 1007.
PO^5 in 1000 part. 900.
„ „ toto 265.

Urin. merid. hor. 1 — $^{1}/_{2}$6.
Qual. urin. clara, alcalina, color. flav.
Quant. 220. Pond. spec. 1018$^{1}/_{2}$.
PO^5 in 1000 part. 2,500.
„ „ toto 550.

Urin. nocturn.
Qual. urin. clara, acida, color. subflav.
Quant. 780. Pond. spec. 1018.
PO^5 in 1000 part. 3,500.
„ „ toto 2,730.

Tempore matutino.
Quant. 520.
PO^5 590.

XXIV horis.
Quant. 1520.
PO^5 3,870. in horam 161.

D. 11. m. Apr.

Urin. matut. Port. 2.
a) hor. 8 — 9. apud exonerationem alvi.
Qual. urin. clara, acidula, color. flav.
Quant. 170. Pond. spec. 1014.
PO^5 in 1000 part. 2,000.
„ „ toto 340.
b) hor. 9 — $^1/_2$1.
Qual. urin. clara, acida, color. lang. flav.
Quant. 330. Pond. spec. 1014$^1/_2$.
PO^5 in 1000 part. 800.
„ „ toto 264.

Urin. nocturn. Port. 2.
a) hor. $^1/_2$6 — $^1/_2$7.
Qual. urin. clara, acidula, color. flav.
Quant. 100. Pond. spec. 1020.
PO^5 in 1000 part. 800.
„ „ toto 80.
b) hor. $^1/_2$7 — 8.
Qual. urin. clara, acida, color. flav.
Quant. 620. Pond. spec. 1025.
PO^5 in 1000 part. 4,500.
„ „ toto 2,790.

Urin. merid. Port. 2.
a) hor. $^1/_2$1 — 3.
Qual. urin. clara, alcalina, color. subflav.
Quant. 160. Pond. spec. 1017.
PO^5 in 1000 part. 1,700.
„ „ toto 272.
b) hor. 3 — $^1/_2$6.
Qual. urin. clara, acida, color. flav.
Quant. 70. Pond. spec. 1020.
PO^5 in 1000 part. 1,900.
„ „ toto 133.

Tempore matutino.
Quant. 500.
PO^5 604.

Tempore pomeridiano.
Quant. 230.
PO^5 405.

Tempore nocturno.
Quant. 720.
PO^5 2,870.

XXIV horis.
Quant. 1280.
PO^5 3,879.
„ in horam 161.

D. 12. m. Apr.

Urin. matut. Port. 2.
a) hor. 8 — 10.
Qual. urin. clara, acida, color. flav.
Quant. 215. Pond. spec. 1016.
PO^5 in 1000 part. 2,200.
„ „ toto 473.
b) hor. 10 — $^1/_2$1.
Qual. urin. clara, acida, color. subflav.
Quant. 255. Pond. spec. 1006.
PO^5 in 1000 part. 1,300.
„ „ toto 331.

Urin. merid.
Qual. urin. clara, acida, col. flav.
Quant. 210. Pond. spec. 1022.
PO^5 in 1000 part. 3,200.
„ „ toto 672.

Urin. nocturn.
Qual. urin. clara, acida, color. e flavo rubesc.
Quant. 600. Pond. spec. 1027$^1/_2$.
PO^5 in 1000 part. 4,200.
„ „ toto 2,520.

Tempore matutino.
Quant. 470.
PO^5 804.

XXIV horis. Quant. 1280. PO^5 3,996. PO^5 in horam 166.

D. 13. m. Apr.

Urin. matut. Port. 2.

a) hor. 8—10.
Qual. urin. clara, acidula col. subflav.
Quant. 190. Pond. spec. 1011.
PO^5 in 1000 part. 800.
„ „ toto 152.

b) hor. 10 — ½12.
Qual. urin. clara, acidula, habebat col. inter subflav. et flav.
Quant. 125. Pond. spec. 1011.
PO^5 in 1000 part. 1,100.
„ „ toto 137.

Urin. nocturn.

Qual. urin. turbida, acida, col. e flavo rubesc.
Quant. 400. Pond. spec. 1030.
PO^5 in 1000 part. 5,400.
„ „ toto 2,160.

Tempore pomeridiano.
Quant. 257.
PO^5 664.

Urin. merid. Port. 3.

a) hor. ½12 — ½2.
Qual. urin. clara, acida. color. flav.
Quant. 50.
PO^5 in 1000 part. 2,900.
„ „ toto 145.

b) hor. ½2—4.
Qual. urin. clara, acida, col. flav.
Quant. 107. Pond. spec. 1025½.
PO^5 in 1000 part. 2,800.
„ „ toto 299.

c) hor. 4—6.
Qual. urin. clara, acida, col. subflav.
Quant. 100. Pond. spec. 1025.
PO^5 in 1000 part. 2,200.
„ „ toto 220.

Tempore matutino.
Quant. 315.
PO^5 289.

XXIV horis.
Quant. 972.
PO^5 3,113.
„ in horam 129.

D. 14. m. Apr.

Urin. matut. Port. 3.

a) hor. 8—9. apud exonerationem alvi.
Qual. urin. nubila, acidula, col. flav.
Quant. 95. Pond. spec. 1019.
PO^5 in 1000 part. 2,600.
„ „ toto 247.

b) hor. 9 — ½11.
Qual. urin. levit. nubila, acida, col. flav.
Quant. 90. Pond. spec. 1020.
PO^5 in 1000 part. 1,700.
„ „ toto 153.

c) hor. ½11 — 1.
Qual. urin. clara acida, color. flav.
Quant. 65. Pond. spec. 1019.
PO^5 in 1000 part. 1,900.
„ „ toto 123.

Urin. nocturn.

Qual. urin. clara, acida, col. e flavo rubesc.
Quant. 320. Pond. spec. 1030½.
PO^5 in 1000 part. 6,700.
„ „ toto 2,144.

Urin. merid. Port. 3.

a) hor. 1—3.
Qual. urin. clara, acida, color. flav.
Quant. 165. Pond. spec. 1017½.
PO^5 in 1000 part. 1,600.
„ „ toto 264.

b) hor. 3—5.
Qual. urin. clara, alcalina, color. flav.
Quant. 145. Pond. spec. 1016.
PO^5 in 1000 part. 800.
„ toto 116.

c) hor. 5—6.
Qual. urin. clara, alcalina, color. flav.
Quant. 80. Pond. spec. 1022.
PO^5 in 1000 part. 900.
„ „ toto 72.

Tempore matutino.
Quant. 250.
PO^5 523.
Tempore pomeridiano.
Quant. 390.
PO^5 452.

XXIV horis. Quant. 960. PO^5 3,119. PO^5 in horam 129.

D. 15. m. Apr.

Urin. matut. Port. 2.
a) hor. 8—$^1/_2$11.
Qual. urin. clara, acida, color. flav.
Quant. 135. Pond. spec. 1017.
PO^5 in 1000 part. 2,100.
„ „ toto 283.
b) hor. $^1/_2$11—$^3/_4$1.
Qual. urin. clara, acida, color. flav.
Quant. 85. Spec. Gew. 1019.
PO^5 in 1000 part. 2,500.
„ „ toto 212.

Urin. merid. hor. $^3/_4$1—$^1/_2$6.
Qual. urin. clara, acidula, color. flav.
Quant. 210. Pond. spec. 1022.
PO^5 in 1000 part. 2,200.
„ „ toto 462.
Urin nocturn. plur. sextar. cerev.
Qual. urin. clara, acida, color. subflav.
Quant. 950. Pond. spec. 1.031.
PO^5 in 1000 part. 2,300.
„ „ toto 2,185.
Tempore matutino.
Quant. 220.
PO^5 495.

XXIV horis. Quant. 1380. PO^5 3,142. PO^5 in horam 131.

D. 16. m. Apr.

Urin. matut. Port. 4.
a) hor. 8—9. apud exonerationem alvi.
Qual. urin. levit. nubila, acidula, habeb. color. int. subflav. et flav.
Quant. 165. Pond. spec. 1.031.
PO^5 in 1000 part. 2,000.
„ „ toto 330.
b) hor. 9—$^1/_2$11.
Qual. urin. clara, alcalina, color. subflav.
Quant. 200. Pond. spec. 1.014.
PO^5 in 1000 part. 1,000.
„ „ toto 200.
c) hor. $^1/_2$11—$^3/_4$12. 2 sextar. cerev.
Qual. urin. clara, acidula, color. lang. flav.
Quant. 220. Pond. spec. 1.014.
PO^5 in 1000 part. 1,000.
„ „ toto 220.

d) hor. $^3/_4$12—1.
Qual. urin. clara, acidula, color. lang. flav.
Quant. 240. Pond. spec. 1.000.
PO^5 in 1000 part. 500.
„ „ toto 120.
Urin. merid. Port. 3.
a) hor. 1—$^1/_2$3.
Qual. urin. clara, acidnla, color. flav.
Quart. 180. Pond. spec. 1.014.
PO^5 in 1000 part. 2,300.
„ „ toto 414.
b) hor. $^1/_2$3—5.
Qual. urin. clara, acidula, color. flav.
Quant. 215. Pond. spec. 1.031.
PO^5 in 1000 part. 3,600.
„ „ tato 774.
c) hor. 5—6.
Qual. urin. clara, acida, color. flav.

Quant. 127. Pond. spec. 1.031.
PO^5 in 1000 part. 2,300.
„ „ toto 2,92.
Urin. nocturn. plur. sextar. cerev.
Qual. urin. clara, acida, color. flav.
Quant. 850. Pond. spec. 1.014.
PO^5 in 1000 part. 2,500.
„ „ toto 2,125.

Tempore matutino.
Quant. 825.
PO^5 870.

Tempore pomeridiano.
Quant. 522.
PO^5 1,480.

XXIV horis. Quant. 2197. PO^5 4,475. PO^5 in horam 186.

D. 17. m. Apr.

Urin. matut. Port. 3.
a) hor. 8 — ½10 apud exonerationem alvi.
Qual. urin. clara, acida, color. flav.
Quant. 105. Pond. spec. 1.031.
PO^5 in 1000 part. 2,900.
„ „ toto 304.
b) hor. ½10 — ½12. 2 sextar. cerevis.
Qual. urin. clara, acida, color. subflav.
Quant. 300. Pond. spec 1.0069.
PO^5 in 1000 part. 1,000.
„ „ toto 300.
c) hor. ½12 — ¾1.
Qual. urin. clara, acidula, color. lang. flav.
Quant. 380. Pond. spec. 1.000.
PO^5 in 1000 part. 500.
„ „ toto 190.

Urin. merid. hor. ¾1 — 5.
Qual. urin. clara, acidula, color. flav.
Quant. 400. Pond. spec. 1.031.
PO^5 in 1000 part. 2,500.
„ „ toto 1,000.

Urin. nocturn.
Qual. urin. clara, acida, habeb. color. int. e flavo rubesc. et e rubro flavesc.
Quant. 520. Pond. spec. 1.028.
PO^5 in 1000 part. 4,200.
„ „ toto 2,184.

Tempore matutino.
Quant. 785.
PO^5 794.

XXIV. horis.
Quant. 1705.
PO^5 3,978.
„ in horam 165.

D. 18. m. Apr.

Urin. matut. Port. 3.
a) hor. 8 — ½10.
Qual. urin. clara, neutra, color. subflav.
Quant. 245. Pond. spec. 1.0069.
PO^5 in 1000 part. 1,000.
„ „ toto 245.
b) hor. ½10 — ½12.
Qual. urin. clara, neutra, habeb. color. int. lang. flav. et subflav.
Quant. 195. Pond. spec. 1.0069.
PO^5 in 1000 part. 500.
„ „ toto 97.
c) hor. ½12 — 1.
Qual. urin. clara, acida, color. flav.
Quant. 325. Pond. spec. 1.014.
PO^5 in 1000 part. 1,400.
„ „ toto 329.

Urin. merid. Port. 2.
a) hor. 1 — 4.
Qual. urin. clara, acidula, col. flav.
Quant. 250. Pond. spec. 1.014.
PO^5 in 1000 part. 1,700.
„ „ toto 425.
b) hor. 4 — ¾6.
Qual. urin. turbida, alcalina, color. subflav.
Quant. 205. Pond. spec. 1.014.
PO^5 in 1000 part. 1,600.
„ „ toto 328.

Urin. nocturn. Tempore vespertino 20 Mlgr. $_2NaOHOPO^5$.
Qual. urin. clara, acida, color. flav.
Quant. 800. Pond. spec. 1.031.
PO^5 in 1000 part. 2,900.
„ „ toto 2,320.

Tempore matutino.
Quant. 675.
PO^5 671.
Tempore pomeridiano.
Quant. 455.
PO^5 753.

XXIV horis. Quant. 1930. PO^5 3,744. PO^5 in horam 156.

D. 19. m. Apr.

Urin. matut. Port. 2.
a) hor. 8 — ½10. apud exonerationem alvi.
hor. 9. Mlgr. 40. $_2NaOHOPO_5$.
Qual. urin. clara, acidula, color. flav.
Quant. 210. Pond. spec. 1.000.
PO^5 in 1000 Th. 800.
„ „ toto 168,
b) hor. ½10 — ¾12.
Qual. urin. clara, acida, color. flav.
Quant. 170. Pond. spec. 1.014.
PO^5 in 1000 Th. 800.
„ „ toto 136.
Urin. nocturn. hor. 11. Mlgr. 80. $_2NaOHOPO^5$
Qual. urin. clara, acida, habebat color. int. flav. et e flavo rubesc.
Quant. 775. Pond. spec. 1.014.
PO^5 in 1000 part. 3,000.
„ „ toto 2,325.
Urin. merid. Port. 3. hor. 1. Mlgr. 60. $_2NaOHOPO^5$.
b) hor. ¾12 — 2.
Qual. urin. clara, acida, color. flav.
Quant. 105. Pond. spec. 1.014.
PO^5 in 1000 part. 1,900.
„ „ toto 198.
b) 2 — 3.
Qual. urin. clara, neutra, color. flav.
Quant. 85. Pond. spec. 1.014.
PO^5 in 1000 part. 1,400.
„ „ toto 119.
c) hor. 3 — 6.
Qual. urin. clara, acida, color. flav.
Quant. 300. Pond. spec. 1.014.
PO^5 in 1000 part. 1,300.
„ „ toto 390.

Tempore matutino.
Quant. 380.
PO^5 304.

Tempore pomeridiano.
Quant. 490.
PO^5 708.

XXIV horis.
Quant. 1645.
PO^5 3,337.
„ in horam 139.

D. 20. m. Apr.

Urin. matut. Port. 3.
a) hor. 8 — ¾10; hor. ½9. Mlgr. 100. $_2NaOHOPO^5$.
Qual. urin. clara, neutra, color. subflav.
Quant. 275. Pond. spec. 1.0069.
PO^5 in 1000 part. 600.
„ „ toto 165.
b) hor. ¾10—12. 2 Sextar. cerev.
Qual. urin. clara, acida, color. lang. flav.
Quant. 350. Pond. spec. 1.0069.
PO^5 in 1000 part. 700.
„ „ toto 245.
c) hor. 12—1.
Qual. urin. clara, acidula, color. lang. flav.
Quant. 240. Pond. spec. 1.000—1.0069.
PO^5 in 1000 part. 500.
„ toto 120.

Urin. merid. Port. 3.

a) hor. 1—3.
Qual. urin. clara, alcalina, color. lang. flav.
Quant. 380. Pond. spec. 1.0069.
PO^5 in 1000 part. 900.
„ „ toto 342.

b) hor. 3—¾5; hor. 4. Mlgr. 80. $_2NaOHOPO^5$.
Qual. urin. clara, acidula, color. subflav.
Quant. 400. Pond. spec. 1.0069.
PO^5 in 1000 part. 800.
„ „ toto 320.

c) hor. ¾5—6.
Qual. urin. clara, neutra, color. subflav.
Quant. 205. Pond. spec. 1.0069.
PO^5 in 1000 part. 1,400.
„ „ toto 287.

Urin. nocturn. (plur. sextar. cerev.).
Qual. urin. clara, acida, color. subflav.
Quant. 2,700. Pond. spec. 1.0069.
PO^5 in 1000 part. 1,100.
„ „ toto 2,970.

Tempore matutino.
Quant. 865.
PO^5 530.

Tempore pomeridiano.
Quant. 985.
PO^5 949.

XXIV horis.
Quant. 4550.
PO^5 4,449.
„ in horam 185.

D. 21. m. Apr.

Urin. matut. Port. 3.

a) hor. 8—½9; apud exonerationem alvi.
Qual. urin. clara, neutra, color. flav.
Quant. 40. Pond. spec. 1.031.
PO^5 in 1000 part. 4,100.
„ „ toto 164.

b) hor. ½9—½11; hor. 9. Mlgr. 100. $_2NaOHO\ PO^5$.
Qual. urin. clara, levit. alcalina, color. flav.
Quant. 110. Pond. spec. 1.014—1.031.
PO^5 in part. 2,400.
„ „ toto 264,

c) hor. ½11—1.
Qual. urin. levit. nubila, acida, color. flav.
Quant. 100. Pond. spec. 1.028.
PO^5 in 1000 part. 4,100.
„ „ toto 410.

Urin. merid.
Qual. urin. clara, acida, color. flav.
Quant. 240. Pond. spec. 1.031.
PO^5 in 1000 part. 3,000.
„ „ toto 720.

Urin. nocturn. hor. 5. temporis vespertini Mlgr. 80. $_2NaOHOPO^5$.
Qual. urin. clara, acida, color. flav.
Quant. 820. Pond. spec. 1.014.
PO^5 in 1000 part. 3,500.
„ „ toto 2,870.

Tempore matutino.
Quant. 250.
PO^5 838.

Tempore pomeridiano.
Quant. 240.
PO^5 720.

XXIV horis.
Quant. 1310.
PO^5 4,428.
„ in horam 184.

D. 22. m. Apr.

Urin. matut. Port. 6.

a) hor. 8—½9 apud exonerationem alvi; brevi tempore inde 100 Mlgr. $_2NaOHOPO^5$.
Qual. urin. clara, acida, color. flav.
Quant. 50. Pond. spec. 1.031.
PO^5 in 1000 part. 2,600.
„ „ toto 130.

b) hor. ½ 9—½ 10.
Qual. urin. clara, alcalina, habeb. color. int. lang. flav. et subflav.
Quant. 195. Pond. spec. 1.0069.
PO^5 in 1000 part. 500.
„ „ toto 97.

c) hor. ½ 10—½ 11.
Qual. urin. clara, acida, color. subflav.
Quant. 85. Pond. spec. 1.0069.
PO^5 in 1000 part. 700.
„ „ toto 59.

d) hor. ½ 11—½ 12.
Qual. urin. clara, alcalina, habeb. color. int. subflav. et flav.
Quant. 165. Pond. spec. 1.0069.
PO^5 in 1000 part. 1,100.
„ „ toto 181.

e) hor. ½ 12—½ 1.
Qual. urin. clara, acida, color. subflav.
Quant. 170. Pond. spec. 1.0069.
PO^5 in 1000 part. 1,100.
„ „ toto 187.

f) hor. ½ 1—1.
Qual. urin. clara, acidula, color. lang. flav.
Quant. 35.
PO^5 in 1000 part. 1,300.
„ „ toto 45.

Urin. merid. Port. 3.

a) hor. 1—½ 3.
Qual. urin. clara, acida, color. flav.
Quant. 86. Pond. spec. 1.031.
PO^5 in 1000 part. 2,700.
„ „ toto 232.

b) hor. ½ 3—5.
Qual. urin. clara, acida, color. flav.
Quant. 230. Spez. Gew. 1.031.
PO^5 in 1000 part. 1,900.
„ „ toto 437.

c) hor. 5—6.
Qual. urin. clara, acida, color. subflav.
Quant. 145. Pond. spec. 1.014.
PO^5 in 1000 part. 1,900.
„ „ toto 275.

Urin. nocturn. hor. ½ 12. Mlgr. 120. $_2NaOHOPO^5$.
Qual. urin. clara, acida, color. subflav.
Quant. 1030. Pond. spec. 1.014.
PO^5 in 1000 part. 2,300.
„ „ toto 2,369.

Tempore matutino.
Quant. 700.
PO^5 699.

Tempore pomeridiano.
Quant. 461.
PO^5 944.

XXIV horis. Quant. 2191. PO^5 4,012. PO^5 in horam 167.

D. 23. m. Apr.

Urin. matut. Port. 5.

a) hor. 8—½ 10; hor. ½ 9. Mlgr. 120, $_2NaOHOPO^5$.
Qual. urin. clara, acida, color. subflav.
Quant. 330. Pond. spec. 1.000.
PO^5 in 1000 part. 1,300.
„ „ toto 429.

b) hor. ½ 10—10 inter exonerationem alvi.
Qual. urin. clara, acida, color. lang. flav.
Quant. 90. Pond. spec. 1.000.
PO^5 in 1000 part. 700.
„ „ toto 63.

c) hor. 10—½ 12. 1 sextar. cerev.
Qual. urin. clara, acida, color. subflav.
Quant. 295. Pond. spec. 1.000—1.0069.
PO^5 in 1000 part. 1,100.
„ „ toto 324.

d) hor. ½ 12—½ 1.
Qual. urin. clara, acidula, color. lang. flav.
Quant. 240. Pond. spec. 1.000.
PO^5 in 1000 part. 200.
„ „ toto 48.

e) hor. ½ 1—1. hor. ¾ 1. Mlgr. 232. $_2NaOHOPO^5$.

Qual. urin. clara, acida, color. lang. flav.
Quant. 165. Pond. spec. 1.000.
PO^5 in 1000 part. 500.
„ „ toto 82.

Urin. merid. hor. 1—4.

Qual. urin. clara, acidula, color. flav.
Quant. 300. Pond. spec. 1.014.
PO^5 in 1000 part. 2,300.
„ „ toto 690.

Urin. nocturn. Port. 2.

a) hor. 4 — ½7; hor. 6. Mlgr. 348. $_2NaOHOPO^5$.
Qual. urin. turbida, alcalina, color. subflav.
Quant. 185. Pond. spec. 1.014.
PO^5 in 1000 part. 2,300.
„ „ toto 425.

b) hor. ½7 temp. vespert. ad 8 temp. matut.; hor. 9. Mlgr. 696. $_2NaOHOPO^5$.
Qual. urin. clara, acida, color. flav.
Quant. 390. Pond. spec. 1.028.
PO^5 in 1000 part. 6,900.
„ toto 2,691.

Tempore matutino.
Quant. 1120.
PO^5 946.

Tempore nocturno.
Quant. 575.
PO^5 3,116.

XXIV horis.
Quant. 1995.
PO^5 4,752.
„ in horam 198.

D. 24. m. Apr.

Urin. matut.

a) hor. 8 — 9 inter exonerationem alvi; hor. ½8. Mlgr. 928. $_2NaOHOPO^5$.
Qual. urin. clara, acida, col. flav.
Quant. 60. Pond. spec. 1.014.
PO^5 in 1000 part. 5,100.
„ „ toto 306.

b) hor. 9 — ½12.
Qual. urin. clara, alcalina, color. flav.
Quant. 165. Pond. spec. 1.014.
PO^5 in 1000 part. 2,300.
„ „ toto 379.

Urin. nocturn.
Qual. urin. clara, acida, color. flav.
Quant. 1100. Pond. spec. 1.0069 ad 1.0014.
PO^5 in 1000 part. 3,200.
„ „ toto 3,520.

c) hor. ½12—½1; hor. ½1. Mlgr. 406. $_2NaOHOPO^5$.
Qual. urin. clara, alcalina, color. subflav.
Quant. 90. Pond. spec. 1.0069.
PO^5 in 1000 part. 2,300.
„ „ toto 207.

Urin. merid.

hor. ½1 — 2.
Qual. urin. clara, acida, color. subflav.
Quant. 95. Pond. spec. 1,014.
PO^5 in 1000 part. 3,600.
„ „ toto 342. Quant. urinae meridianae reliqua perdita est.

Tempore matutino.
Quant. 315.
PO^5 892.

D. 25. m. Apr. (1,566 Grm. $_2NaOHOPO^5$).

Urin. matut. Port. 3.

a) hor. 8 — 9 inter exonerationem alvi, hor. 9. Mlgr. 638. $_2NaOHOPO^5$.
Qual. urin., clara, neutra, color. flav.
Quant. 155. Pond. spec. 1.031
PO^5 in 1000 part. 2,700.
„ „ in toto 418.

b) hor. 9 — ½11.
Qual. urin. clara, neutra, color. subflav.
Quant. 115. Pond. spec. 1.031.

PO^5 in 1000 part. 2,700.
„ „ toto 310.
c) hor. ½11 — 12; hor. ½12.
Mlgr. 638. $_2NaOHOPO^5$.
Qual. urin. clara, neutra, color. subflav.
Quant. 150. Pond. spec. 1.031.
PO^5 in 1000 part. 3,800.
„ „ toto 570.

Urin. merid. Port. 3.

a) hor. 12 — ½2.
Qual. urin. clara, acida, color. flav.
Quant. 70. Pond. spec. 1.028.
PO^5 in 1000 part. 6,900.
„ „ toto 483.
b) hor. ½2 — ½5.
Qual. urin. turbida, acidula, color. flav.
Quant. 175. Pond. spec. 1.028.
PO^5 in 100 part. 4,700.
„ „ toto 822.

Urin. nocturn. hor. 10.
Mlgr. 290. $_2NaOHOPO^5$.
Qual. urin. turbida, acida, color. flav.
Quant. 650. Pond. spec. 1.031.
PO^5 in 1000 part. 3,100.
„ „ toto 2,015.
c) hor. ½5 — ½6.
Qual. urin. clara, acida, color. flav.
Quant. 55. Pond. spec. 1.028.
PO^5 in 1000 part. 4,400.
„ „ toto 242.

Tempore matutino.
Quant. 420.
PO^5 1,298.

Tempore pomeridiano.
Quant. 300.
PO^5 1,547.

XXIV horis.
Quant. 1370.
PO^5 4,869.
„ in horam 202.

D. 26. m. Apr. (hora meridiana Grm. 5. $_2NaOHOPO^5$).

Urin. merid. Port. 3.

a) hor. 12 — 1.
Qual. urin. clara, acida, color. lang. flav.
Quant. 225. Ponp. spec. 1.0069 — 1.0014.
PO_5 in 1000 part. 1,400.
„ „ toto 325.
b) hor. 1 — 2. inter exoneration. alvi.
Qual. urin. clara, acidula, color. flav.
Quant. 130. Pond. spec. 1.014.
PO^5 in 1000 part. 2,000.
„ „ toto 260.
c) hor. 2 — ¾5.
Qual. urin. turbida, acidula, color. lang. flav.
Quant. 570. Pond. spec. 1.0069.
PO^5 in 1000 part. 1,800.
„ „ toto 1,026.

Urin. nocturn.

Qual. urin. clara, maxime acida, color. flav.
Quant. 850. Pond. spec. 1.0014.
PO^5 in 1000 part. 3,100.
„ „ toto 2,635.

Urin. matut. Port. 3.

a) hor. 8 — ¾11.
Qual. urin. clara, alcalina, color. flav.
Quant. 215. Pond. spec. 1.0014.
PO^5 in 1000 part. 1,200.
„ „ toto 258.
b) hor. ¾11 — ½12.
Qual. urin. clara, alcalina, color. lang. flav.
Quant. 340. Pond. spec. 1.000.
PO^5 in 1000 part. 300.
„ „ toto 102.
c) hor. ½12 — 1.
Qual. urin. clara, acidula, color. lang. flav.
Quant. 145. Pond. spec. 1.014.
PO^5 in 1000 part. 1,000.
„ „ toto 145.

Tempore matutino.
Quant. 700.
PO^5 505.

Tempore pomeridiano[1].
Quant. 700.
PO^5 1,286.

XXIV horis. Quant. 2475. PO^5 4,751. PO^5 in horam 197.

D. 27. m. Apr. (hor. ½3 temporis pomeridiani iterum Grm. 5. $_2Na\,OHOPO^5$).

Urin. merid. Port. 5.

a) hor. 1 — ½3.
Qual. urin. clara, acida, color. flav.
Quant. 80. Pond. spec. 1.031.
PO^5 in 1000 part. 3,000.
„ „ toto 240.

b) hor. ½3 — 3.
Qual. urin. clara, acida, color. flav.
Quant. 120. Pond. spec. 1.014.
PO^5 in 1000 Th. 1,700.
„ „ toto 204.

c) hor. 3 — ¾4.
Qual. urin. clara, acida, color. lang. flav.
Quant. 210. Pond. spec. 1.000.
PO^5 in 1000 part. 1,000.
„ „ toto 210.

d) hor. ¾4 — ¾5.
Qual. urin. clara, acidula, color. flav.
Quant. 135. Pond. spec. 1.014.
PO^5 in 1000 part. 2,100.
„ „ toto 283.

e) hor. ¾5 — ¾6.
Qual. urin. clara, acida, color. flav.
Quant. 130. Pond. spec. 1.031.
PO^5 in 1000 part. 2,800.
„ „ toto 364.

Urin. nocturn. Port. 4.

a) hor. ¾6 — ½7.
Qual. urin. clara, acida, color flav.
Quant. 55. Pond. spec. 1.028.
PO^5 in 1000 part. 3,100.
„ „ toto 170.

b) hor. ½7 temp. vesp. — 7 temp. matutin.
Qual. urin. clara, acida, color. flav.
Quant. 405. Pond. spec. 1.028.
PO^5 in 1000 part. 6,300.
„ „ toto 2,551.

c) hor. 7. int. exoneration. alvi.
Qual. urina clara, acida, color. flav.
Quant. 20. Pond. spec. vac.
PO^5 in 1000 part. 5,300.
„ „ toto 106.

d) hor. 7 — 8.
Qual. urin. clara, acida, color. subflav.
Quant. 185. Pond. spec. 1.000.
PO^5 in 1000 part. 600.
„ „ toto 111.

Urin. matut. Port. 4.

a) hor. 8 — 9.
Qual. urin. clara, acidula, lang. flav.
Quant. 200. Pond. spec. 1.000 — 1.0069.
PO^5 in 1000 part. 600.
„ „ toto 120.

b) hor. 9 — 10.
Qual. urin. clara, neutra, lang. flav.
Quant. 150. Pond. spec. 1.0069.
PO^5 in 1000 part. 600.
„ „ toto 90.

c) hor. 10 — ¾11.
Qual. urin. clara, neutra, color. subflav.
Quant. 115. Pond. spec. 1.014.
PO^5 in 1000 part. 1,000.
„ „ toto 115.

1) Quantitas horae 12 — 1 (= 225 Ccm. et 325 Mlgr. PO^5) propter divisionem temporis signatam ab urina meridiana subtrahenda est.

d) hor. ¾11 — ½12.
Qual. urin. turbida, neutra, color. lang. flav.
Quant. 75. Pond. spec. 1.0069 — 1.014.
PO^5 in 1000 part. 1,300.
„ „ toto 97.
Tempore pomeridiano.
Quant. 675.
PO^5 1,301.

Tempore nocturno.
Quant. 665.
PO^5 2,938.
Tempore matutino.
Quant. 540.
PO^5 422.
XXIV horis.
Quant. 1920.
PO^5 4,817.
„ in horam 200.

D. 28. m. Apr.

Urinae meridianae pars, quae etiam ad completionem XXIV horar. antea pertinet. hor. ½12 — ½3.

Qual. urin. levit. nubila, acida, color. flav.
Quant. 120. Pond. spec. 1.014.
PO^5 in 1000 part. 3,300.
„ „ toto 396.

Aegrotus K. triginta sex annos natus, qui erat macer satisque longus, mense Novembr. anni praeteriti, quantum ego hac de re comperire poteram, in regione hypochondriaca dextra doloribus vehementissimis affectus est. Paullo post morbus quidam hepaticus cognoscebatur, qui etiam pectoris organa afficiebat, ita ut aegroti spiritus angustior fieret, ipseque aegrotus multum ejiceret. Aegrotus aliquamdiu apud suos polyclinice tractatus, tandem in regium nosocomium reciebatur. Aegrotus jam vehementer collapsus colorem faciei habebat subflavum, cibi cupiditate prorsus carebat et tussione vehementissima sub diem noctemque torquebatur. Alvi exoneratio erat abnormis, ita ut aegrotus per dies complures alvum haberet obstructum aut saepe admodum apertum. Febris cum levi quodam gelu conjuncta postea demum accedebat, etiam articulatio genu tumescebat, quare aegrotus magno dolore affectus, initio se loco movere non poterat. Excrementa saepe erant odoris acerrimi et coloris e viridi flavescentis. Tempore matutino aegrotus tantum rarissime urinam emittebat, et quotiescunque perpaucam. Urina semel spatio diei interjecto colligebatur, non semel in duobus temporis spatiis et urina diurna (hor. 1. temp. mer. — hor. 6. temp. vesp.) utque nocturna (hor. 6. temp. vesp. — hor. 8. temp. mat.) consignabatur. Plurimae autem urinae quentitates intra XXIV horas secretae secundum divisionem diei supra nominatam colligebantur. Urinae color erat admodum mutabilis et saepe propter sedimenta acidi urici salium copiosa cognosci non poterat. In infimo vitro etiam saepe purum acidum uricum conspiciebatur. Qualitas urinae chemica semper acida erat. Urina per XXIV dies observabatur.

D. 1. m. Apr.

Urin. XXIV horar.

Qual. urin. turbida, acida, color. e flavo rubesc.

Quant. 1320. Pond. spec. 1011 ½.

PO^5 in 1000 part. 1,923.

„ „ toto 2,538.

„ „ horam 109.

D. 2. m. Apr. Port. 2.

Urin. nocturn.

Qual. urin. clara, acida, color. subflav.

Quant. 675. Pond. spec. 1011 ½.

PO^5 in 1000 part. 1,923.

„ „ toto 1,282.

Urin. diurna.

Qual. urin. clara, acidula, color. e rubro flavesc.

Quant. 850. Pond. spec. 1014.

PO^5 in 1000 part. 2,600.

„ „ toto 2,210.

XXIV horis. Quant. 1525. PO^5 3,508. PO^5 in hor. 146.

D. 3. m. Apr. Port. 2.

Urin. nocturn.

Qual. urin. clara, sedimento acidi urici leve, color. e flavo rubesc.

Quant. 790. Pond. spec. 1014.

PO^5 in 1000 part. 2,300.

„ „ toto 1,817.

Urin. diurn.

Qual. urin. clara, acida, color. lang. flav.

Quant. 600. Pond. spec. 1010.

PO^5 in 1000 part. 1,923.

„ „ toto 1,153.

XXIV horis. Quant. 1390. PO^5 2,970. PO^5 in horam. 123.

D. 4. m. Apr. Port. 2.

Urin. nocturn.

Qual. urin. clara, acida, color. e flavo rubesc.

Quant. 668. Pond. spec. 1012 ½.

PO^5 in 1000 part. 1,300.

„ „ toto 868.

Urin. diurna.

Qual. urin. maxime turbida, sedimento acidi urici salium copioso; color urinae filtratae int. e flavo rubesc. et rubro flavesc.

Quant. 600. Pond. spec. 1018 ½.

PO^5 in 1000 part. 3,400.

„ „ toto 2,040.

XXIV horis. Quant. 1268. PO^5 2,908. PO^5 in hor. 121.

D. 5. m. Apr.

Urin. merid.

Qual. urin. levit. nubila, acida, color. e flavo rubesc.

Quant. 560. Pond. spec. 1011 ½.

PO^5 in 1000 part. 1,700.

„ „ toto 952.

Urin. matut. vac.

Urin. nocturna.

Qual. urin. levit. turbida, acida, color. subflav.

Quant. 970. Pond. spec. 1009 ½.

PO^5 in 1000 part. 900.

„ „ toto 873.

XXIV horis. Quant. 1530. PO^5 1,825. PO^5 in hor. 76.

D. 6. m. Apr.

Urin. merid.

Qual. urin. clara, maxime acida, color. e flavo rubesc.

Quant. 140. Pond. spec. 1018 ½.

PO^5 in 1000 part. 3,400.

„ „ toto 476.

Urin. nocturn.
Qual. urin. clara, acida, color. e flavo rubesc.
Quant. 550. Pond. spec. 1018½.
PO^5 in 1000 part. 3,000.
„ „ toto 1,650.

XXIV horis. Quant. 690. PO^5 2,126. PO^5 in hor. 88.

D. 7. m. Apr.

Urin. merid.
Qual. urin. clara, acida, color. subflav.
Quant. 320. Pond. spec. 1011½.
PO^5 in 1000 part. 1,500.
„ „ toto 480.

Urin. nocturn.
Qual. urin. maxime nubila, acida, color. subflav.
Quant. 1460. Pond. spec. 1010.
PO^5 in 1000 part. 900.
„ „ toto 1,314.

XXIV horis. Quant. 1780. PO^5 1,794. PO^5 in hor. 74.

D. 8. m. Apr.

Urin. merid.
Qual. urin. clara, acida, color. e rubro flavesc.
Quant. 250. Pond. spec. 1019.
PO^5 in 1000 part. 2,500.
„ „ toto 625.

Urin. matut.
Qual. urin. sedimento acidi urici salium copiosissimo, color urinae filtratae inter e flavo rubesc. et e rubro flavesc.
Quant. 50.
PO^5 in 1000 part. 3,400.
„ „ toto 170.

Urin. nocturn.
Qual. urin. levit. nubila, acida, color. e rubro flavesc.
Quant. 680. Pond. spec. 1014.
PO^5 in 1000 part. 1,100.
„ „ toto 748.

XXIV horis.
Quant. 980.
PO^5 1,543.
„ in hor. 64.

D. 9. m. Apr.

Urin. merid.
Qual. urin. clara, acida, color. subflav.
Quant. 250. Pond. spec. 1008.
PO^5 in 1000 part. 1700.
„ „ toto 425.

Urin. nocturn.
Qual. urin. levit. nubila, acida, color. subflav.
Quant. 850. Pond. spec. 1011.
PO^5 in 1000 part. 1,300.
„ „ toto 1,105.

XXIV horis. Quant. 1100. PO^5 1,530. PO^5 in hor. 63.

D. 10. m. Apr.

Urin. merid.
Qual. urin. levit. nubila, acida, color. e flavo rubesc.
Quant. 280. Pond. spec. 1020.
PO^5 in 1000 part. 1,700.
„ „ toto 467.

Urin. nocturn. Port. 2.

a) hor. 6. tempor. vespert. — hor. 6. tempor. matut.
Qual. urin. nubila, acida, color. subflav.
Quant. 850. Pond. spec. 1011.
PO^5 in 1000 part. 1,300.
„ „ toto 1,105.

b) hor. 6 — 8.
Qual. urin. clara, acida, colore lang. flav.
Quant. 310. Pond. spec. 1013½.
PO^5 in 1000 part. 1,300.
„ „ toto 403.

Tempore nocturno.
Quant. 1160.
PO^5 1,508.

XXIV horis. Quant. 1440. PO^5 1,975. PO^5 in hor. 82.

D. 11. m. Apr.

Urin. merid.

Qual. urin. clara, maxim. acida, color. flav.; post horam dimidiam sedimenta acidi urici sal. copiosissima.

Quant. 100. Pond. spec. 1025 ½.

PO^5 in 1000 part. 3,400.

„ „ toto 340.

Urin. nocturn.

Qual. urin. levit. nubila, acida, colore e flavo rubesc.

Quant. 810. Pond. spec. 1015.

PO^5 in 1000 part. 2,100.

„ „ toto 1,701.

XXIV horis.

Quant. 910.

PO^5 2041.

„ in hor. 85.

D. 12. m. Apr.

Urin. merid.

Qual. urin. sedimento acidi urici salium copiosissimo, color. percolatione facta flav.

Quant. 220. Pond. spec. 1024.

PO^5 in 1000 part. 2,900.

„ „ toto 638.

Urin. mutat.

Qual. urin. clara, acida, colore e flavo rubesc.

Quant. 200. Pond. spec. 1016.

PO^5 in 1000 part. 1,100.

„ „ toto 220.

Urin. nocturn.

Qual. urin. nubila, acida, color. inter subflav. et flav., acido urico copiosa.

Quant. 800. Pond. spec. 1013.

PO^5 in 1000 part. 1,500.

„ „ toto 1,200.

XXIV horis.

Quant. 1220.

PO^5 2,058.

„ in hor. 85.

D. 13. m. Apr.

Urin. merid.

Qual. urin. nubila, acida, color. e flavo rubesc., brevi tempore sedimenta acidi urici sal. copiosa.

Quant. 115. Pond. spec. 1024.

PO^5 in 1000 part. 2,200.

„ „ toto 253.

Urin. nocturn.

Qual. urin. clara, acida, color. e flavo rubesc.

Quant. 900. Pond. spec. 1015 ½.

PO^5 in 1000 part. 1,700.

„ „ toto 1,530.

Urin. matut.

Urin. clara, acidissima, color. e flavo rubesc.

Quant. 100. Pond. spec. 1022.

PO^5 in 1000 part. 1,100.

„ „ toto 110.

XXIV horis.

Quant. 1115.

PO^5 1,893.

„ in hor. 78.

D. 14. m. Apr.

Urin. merid.

Qual. urin. nubila, acida, colore e flavo rubesc.

Quant. 180. Pond. spec. 1020.

PO^5 in 1000 part. 1,400.

„ „ toto 252.

Urin. matut.

Qual. urin. clara, acida, color. intr. e flavo rubesc. et e rubro flavesc.

Quant. 195. Pond. spec. 1017.

PO^5 in 1000 part. 2,800.

„ „ toto 546.

Urin. nocturn.
Qual. urin. nubila, col. inter flav. et e flavo rubesc.; ante percolation. sedimenta acidi urici sal. copiosa.
Quant. 910. Pond. spec. 1013½.
PO^5 in 1000 part. 1,000.
„ „ toto 910.

XXIV horis.
Quant. 1285.
PO^5 1,708.
„ in hor. 71.

D. 15. m. Apr.

Urin. merid.
Qual. urin. clara, acida, color. flav.
Quant. 220. Pond. spec. 1019.
PO^5 in 1000 part. 1,900.
„ „ toto 418.

Urin. matut.
Qual. urin. clara, acida, colore e rubro flavesc.
Quant. 120. Pond. spec. 1017.
PO^5 in 1000 part. 1,100.
„ „ toto 132.

Urin. nocturn.
Qual. urin. clara, acida, color. lang. flav.
Quant. 1650. Pond. spec. 1008.
PO^5 in 1000 part. 800.
„ „ toto 1,320.

XXIV horis.
Quant. 1990.
PO^5 1,870.
„ in hor. 77.

D. 16. m. Apr.

Urin. merid. (Patiens febri vehemente correptus est).
Qual. urin. nubila, acida, colore e flavo rubesc.
Quant. 300. Pond. spec. 1017.
PO^5 in 1000 part. 2,000.
„ „ toto 600.

Urin. matut. (Patiens de novo febri correptus est, quae per plures dies temporibus variis reversa est).
Qual. urin. nubila, acida, colore e rubro flavesc.
Quant. 240. Pond. spec. 1.014.
PO^5 in 1000 part. 1,100.
„ „ toto 264.

Urin. noct.
Qual. urin. clara, acida, color. subflav.
Quant. 1300. Pond. spec. 1.014.
PO^5 in 1000 part. 800.
„ „ toto 1,040.

XXIV horis.
Quant. 1840.
PO^5 1,904.
„ in hor. 79.

D. 17. m. Apr.

Urin. merid.
Qual. urin. clara, acida, color. inter flav. et e flavo rubesc.
Quant. 150. Pond. spec. 1.014.
PO^5 in 1000 part. 800.
„ „ toto 120.

Urin. matut.
Qual. urin. nubila, acida, color. e flavo rubesc., brevi tempore sedimenta acidi urici sal copiosa.
Quant. 230. Pond. spec. 1.028.
PO^5 in 1000 part. 2,700.
„ „ toto 621.

Urin. nocturn.
Qual. urin. nubila, acida, color. e flavo rubesc.
Quant. 820. Pond. spec. 1.014.
PO^5 in 1000 part. 900.
„ „ toto 738.

XXIV horis.
Quant. 1200.
PO^5 1,479.
„ in hor. 61.

D. 18. m. Apr.

Urin. merid. vac.

Urin. matut.

Qual. urin. sedimentis acidi urici sal. copiosissimis, percolatione facta nubila, color. e flavo rubesc.
Quant. 125. Pond. spec. 1.028.
PO^5 in 1000 part. 2,200.
„ „ toto 275.

Urin. nocturn.

Qual. urin. nubila, acida, col. inter e flavo rubesc. et e rubro flavesc.
Quant. 850. Poud. spec. 1.014.
PO^5 in 1000 part. 1,600.
„ „ toto 1,360.

XXIV horis. Quant. 975. PO^5 1,635. PO^5 in horam 68.

D. 19. m. Apr.

Urin. merid.

Qual. urin. clara, acida, color. e rubro flavesc.
Quant. 160. Pond. spec. 1.031.
PO^5 in 1000 part. 3,600.
„ „ toto 576.

Urin. matut.

Qual. urin. nubila, acida, color. e flavo rubesc.
Quant. 40.
PO^5 in 1000 part. 1,900.
„ „ toto 76.

Urin. nocturn.

Qual. urin. turbida, acida, colore e flavo rubesc.
Quant. 810. Pond. spec. 1.031.
PO^5 in 1000 part. 1,300.
„ „ toto 1,053.

XXIV horis.
Quant. 1010.
PO^5 1,705.
„ in hor. 71.

D. 20. m. Apr.

Urin. merid.

Qual. urin. clara, acida, colore e rubro flavesc.
Quant. 150. Pond. spec. 1.031.
PO^5 in 1000 part. 3,500.
„ „ toto 525.

Urin. matut.

Qual. urin. nubila, acida, colore e rubro flavesc.
Quant. 110. Pond. spec. 1.028.
PO^5 in 1000 part. 1,900.
„ „ toto 209.

Urin. nocturn.

Qual. urin. nubila, acida, color. inter e flavo rubesc. et e rubro flavesc.
Quant. 465. Pond. spec. 1.031.
PO^5 in 1000 part. 2,000.
„ „ toto 930.

XXIV horis.
Quant. 725.
PO^5 1,364.
„ in hor. 56.

D. 21. m. Apr.

Urin. merid.

Qual. urin. clara, acida, colore e rubro flavesc.
Quant. 120. Pond. spec. 1.028.
PO^5 in 1000 part. 2,700.
„ „ toto 324.

Urin. matut.

Qual. urin. levit. nubila, colore e flavo rubesc., acido urico copiosa.
Quant. 165. Pond. spec. 1.031.
PO^5 in 1000 part. 1,400.
„ „ toto 231.

Urin. nocturn.

Qual. urin. maxim. nubila, acida, color. e flavo rubesc.
Quant. 550. Pond. spec. 1.031.
PO^5 in 1000 part. 2,000.
„ „ toto 1,100.

XXIV horis. Quant. 835. PO^5 1,655. PO^5 in hor. 68.

D. 22. m. Apr.

Urin. merid.
Qual. urin. nubila, acida, col. flav.
Quant. 350. Pond. spec. 1.0069.
PO^5 in 1000 part. 1,400.
„ „ toto 490.

Urin. matut.
Qual. urin. nubila, acida, colore e flavo rubesc.
Quant. 175. Pond. spec. 1.014.
PO^5 in 1000 part. 2,300.
„ „ toto 402.

Urin. noctun.
Qual. urin. nubila, acida, color. flav.
Quant. 870. Pond. spec. 1.014.
PO^5 in 1000 part. 1,000.
„ „ toto 870.

XXIV horis.
Quant. 1395.
PO^5 1,762.
„ in hor. 73.

D. 23. m. Apr.

Urin. merid.
Qual. urin. clara, acida, color. flav.
Quant. 625. Pond. spec. 1.0069.
PO^5 in 1000 part. 1,100.
„ „ toto 687.

Urin. matut.
Qual. urin. nubila, col. inter e flavo rubesc. et e rubro flavesc., acido urico copiosa.
Quant. 250. Pond. spec. 1.014.
PO^5 in 1000 part. 1,300.
„ „ toto 325.

Urin. nocturn.
Qual. urin. nubila, acida, color. flav.
Quant. 875. Pond. spec. 1.0069.
PO^5 in 1000 part. 1,300.
„ „ toto 1,137.

XXIV horis.
Quant. 1750.
PO^5 2,149.
„ in hor. 89.

D. 24. m. Apr.

Urin. merid.
Qual. uriu. turbida, acida, colore e flavo rubesc.
Qant. 120. Pond. spec. 1.014.
PO^5 in 1000 part. 2,200.
„ „ toto 264.

Aegroti Hi et Hei febri intermittente quotiana laborantes in nosocomium recipiebantur. Uterque non multo plures quam viginti annos natus gracili quidem, sed firmo corpore, et in intermissionibus specie bona et floronte, quatuordecim dies in nosocomio versabatur et per hoc tempus quater pyrexiam habebat, quae semper sub prima luce coepit. Hei febri vehementiore affectus erat, quam Hi. Chinino sulphurico recte adhibito omnes alii impetus tandem deficiebant. Cibus aegrotorum conditionibus conveniens primum erat tenuis, deinde largior. Urina aegrotorum per duodecim dies observabatur.

A. Hi.

D. 14. m. Apr.

Urin. merid. (Pyrexia tempore matutino.)

Qual. urin. clara, acidula, col. inter e flavo. rubesc. et e rubro flavesc.

Quant. 130. Pond. spec. 1018.

PO^5 in 1000 part. 300.

„ „ toto 39.

Urin. matut.

Qual. urin. sedimentis acidi urici salium copiosissimis, col. percocolatione facia inter e flavo rubesc. et e rubro flaversc.

Quant. 100. Pond. spec. 1026.

PO^5 in 1000 part. 2,000.

„ „ toto 200.

Urin. nocturn.

Qual. urin. nubila, acida, col. e flavo rubesc.

Quant. 530. Pond. spec. 1024.

PO^5 in 1000 part. 3,600.

„ „ toto 1,908.

XXIV horis.

Quant. 760.

PO^5 2,147.

„ in horam 89.

D. 15. m. Apr.

Urin. merid.

Qual. urin. max. acida, sedimentis acidi urici salium copiosis, col. inter e flavo rubesc. et e rubro flavesc.

Quant. 105. Pond. spec. 1027.

PO^5 in 1000 part. 3,300.

„ „ toto 346.

Urin. nocturn.

Qual. urin. acida, levit. nubila, col. e flavo rubesc.

Quant. 805. Pond. spec. 1022.

PO^5 in 1000 part. 2,200.

„ „ toto 1,771.

Urin. matut. Port. 2.

a) hor. 8—10. inter Pyrexiam.

Qual. urin. clara, neutra, color. lang. flav.

Quant. 530. Pond. spec. 1012.

PO^5 in 1000 part. 100.

„ „ toto 53.

b) hor. 10—1. Pyrexia finita.

Qual. urin. levit. nubila, acida, color. subflav.

Quant. 310. Pond. spec. 1015 ½.

PO^5 in 1000 part. 200.

„ „ toto 62.

Tempore matutino.

Quant. 840.

PO^5 115.

XXIV horis.

Quant. 1750.

PO^5 2,232.

„ in horam 93.

D. 16. m. Apr.

Urin. merid.

Qual. urin. clara, acida, color. e flavo rubesc.

Quant. 100. Pond. spec. 1022.

PO^5 in 1000 part. 200.

„ „ toto 20.

Urin. matut.

Qual. urin clara, alcalina, col. e flavo rubesc.

Quant. 220. Pond. spec. 1011.

PO^5 in 1000 part. 300.

„ „ toto 66.

Urin. nocturn. Port. 2.

a) hor. 6. temp. vespert. — 6. temp.

Qual. urin. nubila, acida, col. e flavo rubesc.

Quant. 880. Pond. spec. 1010.

PO^5 in 1000 part. 700.

„ „ toto 616.

b) hor. 6—8. temp. mat.

Qual. urin. nubila, acida, col. int. flav. et e flavo rubesc.

Quant. 640. Pond. spec. 1008.
PO^5 in 1000 part. 1,700.
„ „ toto 1,088.

Tempore nocturno.
Quant. 1520.
PO^5 1,704.

XXIV horis. Quant. 1840. PO^5 1,790. PO^5 in horam 74.

D. 17. m. Apr.

Urin. merid.

Qual. urin. clara, acida, col. inter. lang. flav. et subflav.
Quant. 730. Pond. spec. 1005.
PO_5 in 1000 part. 1,000.
„ „ toto 730.

Urin. matut.

Qual. urin. clara, acida, col. inter subflav. et flav.
Quant. 115. Pond. spec. 1.028.
PO^5 in 1000 part. 3,000.
„ „ toto 345.

Urin. nocturn.

Qual. urin. clara, acida, col. lang. flav.
Quant. 1150. Pond. spec. 1011.
PO^5 in 1000 part. 1,500.
„ „ toto 1,725.

XXIV horis.
Quant. 1995.
PO^5 2,800.
„ in horam 116.

D. 18. m. Apr.

Urin. merid.

Qual. urin. clara, acida, col. flav.
Quant. 315. Pont. spec. 1.014.
PO^5 in 1000 part. 2,000.
„ „ toto 630.

Urin. matut.

Qual. urin. levit. nubila, acida, col. eflavo rubesc.
Quant. 320. Pond. spec. 1.014.
PO^5 in 1000 part. 1,000.
„ „ toto 320.

Urin. nocturn.

Qual. urin. nubila, acida, color. e flavo rubesc.
Quant. 450. Pond. spec. 1.031.
PO^5 in 1000 part. 2,600.
„ „ toto 1,170.

XXIV horis.
Quant. 1085.
PO^5 2,120.
„ in hor. 88.

D. 19. m. Apr.

Urin. merid.

Qual. urin. clara, acidula, color. subflav.
Quant. 850. Pond. spec. 1.0069.
PO^5 in 1000 part. 700.
„ „ toto 595.

Urin. matut.

Qual. urin. levit. nubila, acida, col. flav.
Quant. 550. Pond. spec. 1.014.
PO^5 in 1000 part. 200.
„ „ toto 110.

Urin. nocturn. Port, 2.

a) hor. 6. temp. verspert. — 7. temp. matut.
Qual. urin. turbida, acida, col. subflav.
Quant. 900. Pond. spec. 1.0069.
PO^5 in 1000 part. 1,300.
„ „ toto 1,170.

b) hor. 7—8.
Qual. urin. levit. nubila, acida, col. lang. flav.
Quant. 270. Pond. spec. 1.0069.
PO^5 in 1000 part. 400.
„ „ toto 108.

Tempore nocturno.
Quant. 1,170.
PO^5 1,278.

XXIV horis.
Quant. 2,570.
PO^5 1,983.
„ in horam 82.

D. 20. m. Apr.

Urin. merid.
Qual. urin. clara, acida, col. flav.
Quant. 740. Pond. spec. 1.014.
PO^5 in 1000 part. 700.
„ „ toto 518.

Urin. matut.
Qual. urin. clara, acida, col. flav.
Quant. 260. Pond. spec. 1.014.
PO^5 in 1000 part. 500.
„ „ toto 130.

Urin. nocturn. Port. 3.
a) Qual. urin. clara, acida, col. inter lang. flav. et subflav.
Quant. 910. Pond. spec. 1.0069.
PO^5 in 1000 part. 400.
„ „ toto 364.
b) Qual. urin. levit. nubila, acida, col. flav.
Quant. 890. Pond. spec. 1.0069.
PO^5 in 1000 part. 800.
„ „ toto 712.
c) Qual. urin. clara, acida, col. subflav.
Quant. 900. Pond. spec. 1.0069.
PO^5 in 1000 part. 200.
„ „ toto 180.

Tempore nocturno.
Quant. 2700.
PO^5 1,256.

XXIV horis.
Quant. 3700.
PO^5 1,904.
„ in horam 79.

D. 21. m. Apr.

Urin. merid.
Qual. urin. clara, acida, color. flav.
Quant. 800. Pond. spec. 1.014.
PO^5 in 1000 part. 800.
„ „ toto 640.

Urin. matut.
Qual. urin. acidi urici salium sedimentis, percolatione facta turbida, col. flav.
Quant. 265. Pond. spec. 1.028.
PO^5 in 1000 part. 1,300.
„ „ toto 344.

Urin. nocturn.
Qual. urin. levit. nubila, acida, col. e flavo rubesc.
Quant. 445. Pond. spec. 1.031.
PO^5 in 1000 part. 3,800.
„ „ toto 1,691.

XXIV. horis.
Quant. 1510.
PO^5 2,675.
„ in horam 110.

D. 22. m. Apr.

Urin. merid.
Qual. urin. clara, acida, col. inter flav. et e flavo rubesc.
Quant. 220. Pond. spec. 1.031 — 1.028.
PO^5 in 1000 part. 4,500.
„ „ toto 990.

Urin. matut.
Qual. urin. nubila, acida, col. flav.
Quant. 340. Pond. spec. 1.031.
PO^5 in 1000 part. 1,400.
„ „ toto 476.

Urin. nocturn.
Qual. urin. max. nubila, acida, col. flav.
Quant. 900. Pond. spec. 1.014 — 1.031.
PO^5 in 1000 part. 2,600.
„ „ toto 2,340.

XXIV horis.
Quant. 2460.
PO^5 3,806.
„ in horam 158.

D. 23. m. Apr.

Urin. merid.

Qual. urin. clara, acida, col. subflav.
Quant. 880. Pond. spec. 1.0069.
PO^5 in 1000 part. 500.
„ „ toto 440.

Urin. matut.

Qual. urin. levit. nubila, acida, col. flav.
Quant. 870. Pond. spec. 1.0069.
PO^5 in 1000 part. 500.
„ „ toto 435.

Urin. nocturn.

Qual. urin. nubila, continens acid. uric, col. inter flav. et e flavo rubesc.
Quant. 660. Pond. spec. 1.0014.
PO^5 in 1000 part. 2,900.
„ „ toto 1,914.

XXIV horis.

Quant. 2410.
PO^5 2,789.
„ in hor. 116.

D. 24. m. Apr.

Urin. merid.

Qual. urin. levit. nubila, acida, col. flav.
Quant. 655. Pond. spec. 1.0069.
PO^5 in 1000 part. 800.
„ „ toto 524.

Urin. matut.

Qual. urin. levit. nubila, acida, col. int. flav. et e flavo rubesc.
Quant. 900. Pond. spec. 1.0069.
PO^5 in 1000 part. 700.
„ „ toto 630.

Urin. nocturn.

Qual. urin. levit. nubila, acida, col. flav.
Quant. 960. Pond. spec. 1.014.
PO^5 in 1000 part. 2,200.
„ „ toto 2,112.

XXIV horis.

Quant. 2515.
PO^5 3,266.
PO^5 in horam 136.

D. 25. m. Apr.

Urin. merid.

Qual. urin. clara, acida, col. subflav.
Quant. 600. Pond. spec. 1.0069.
PO^5 in 1000 part. 700.
„ „ toto 420.

B. Hei.

D. 14. m. Apr.

Urin. matut. Pyrexia.

Qual. urin. clara, alcalina, col. e flav. rubesc.
Quant. 410. Pond. spec. 1015.
PO^5 in 1000 part. 400.
„ „ toto 164.

Urin. nocturn.

Qual. urin. nubila, acida, col. e rubro flavesc.
Quant. 400. Pond. spec. 1024.
PO^5 in 1000 part. 5,700.
„ „ toto 2,280.

Urin. merid.

Qual. urin. nubila, acida, col. e flavo rubesc.
Quant. 620. Pond. spec. 1011.
PO^5 in 1000 part. 200.
„ „ toto 124.

XXIV horis.

Quant. 1430.
PO^5 2,568.
„ in horam 107.

D. 15. m. Apr.

Urin. merid.
Qual. urin. clara, acida, col. e rubro flavesc.
Quant. 190. Pond. spec. 1024 ½.
PO^5 in 1000 part. 2,500.
„ „ toto 475.
Urin. matut. Pyrexia finita.
Qual. urin. clara, acida, col. e flavo rubesc.
Quant. 530. Pond. spec. 1013.
PO^5 in 1000 part. 200.
„ „ toto 106.
Urin nocturn. Port. 2.
a) hor. 6 temp. vespert. ad 4 temp. matut.
Qual. urin. levit. nubila, acida, col. e flavo rubesc.
Quant. 900. Pond. spec. 1020.
PO^5 in 1000 part. 2,100.
„ toto 1,890.
b) hor. 4—8 temp. matut. Pyrexia.
Qual. urin. clara, acida, color. lang. flav.
Quant. 930. Pond. spec. 1008.
PO^5 in 1000 part. 200.
„ „ toto 186.
Tempore nocturno.
Quant. 1830.
PO^5 2,076.

XXIV horis.
Quant. 2550.
PO^5 2,667.
„ in horam 111.

D. 16. m. Apr.

Urin. merid.
Qual. urin. clara, acida, col. e flavo rubesc.
Quant. 120. Pond. spec. 1013.
PO^5 in 1000 part. 2,100.
„ „ toto 252.
Urin. matut. Pyrex. incomplet.
Qual. urin. levit. nubila, contin. acid. uric. col. subflav.
Quant. 510. Pond. spec. 1009.
PO^5 in 1000 part. 900.
„ „ toto 459.

Urin. nocturn.
Qual. urin. nubila, acida, col. e rubro flavesc.
Quant. 640. Pond. spec. 1015.
PO^5 in 1000 part. 2,000.
„ „ toto 1,280.

XXIV horis.
Quant. 1270.
PO^5 1,991.
„ horam 82.

D. 17. m. Apr.

Urin. merid.
Qual. urin. clara, alcalina, col. e rubro flavesc.
Quant. 305. Pond. spec. 1020.
PO^5 in 1000 part. 1,600.
„ „ toto 488.
Urin. matut.
Qual. urin. clara, alcalina, col. lang. flav.
Quant. 900. Pond. spec. 1.014.
PO^5 in 1000 part. 200.
„ „ toto 180.

Urin. nocturn.
Qual. urin. nubila, acida, col. inter e flavo rubesc. et e rubro flavesc.
Quant. 710. Pond. spec. 1018.
PO^5 in 1000 part. 1,700.
„ „ toto 1,207.

XXIV horis.
Quant. 1915.
PO^5 1,875.
„ in hor. 78.

D. 18. m. Apr.

Urin. merid.

Qual. urin. clara, acida, col. inter e rubro flavesc. et rubr.

Quant. 165. Pond. spec. 1.031 — 1.028.

PO^5 in 1000 part. 1,300.

„ in toto 214.

Urin. matut.

Qual. urin. levit. nubila, alcalina, col. e rubro flavesc.

Quant. 290. Pond. spec. 1.014.

PO^5 in 1000 part. 500.

„ „ toto 145.

Urin. nocturn.

Qual. urin. levit. nubila, acida, col. e rubro flavesc.

Quant. 710. Pond. spec. 1.014.

PO^5 in 1000 part. 2,300.

„ „ toto 1,633.

XXIV horis.

Quant. 1165.

PO^5 1,992.

„ in hor. 83.

D. 19. m. Apr.

Urin. merid.

Qual. urin. levit. nubila, acida, col. e flavo rubesc.

Quant. 450. Pond. spec. 1.014.

PO^5 in 1000 part. 1,400.

„ „ toto 630.

Urin. matut.

Qual. urin. sedimento acidi urici salium copioso, percolatione facta nubila, col. e flavo rubesc.

Quant. 100. Pond. spec. 1.028.

PO^5 in 1000 part. 1.900.

„ „ toto 190.

Urin. nocturn.

Qual. urin. levit. nubila, acida, col. inter e flavo rubesc. et e rubro flavescens.

Quant. 630. Pond. spec. 1.014.

PO^5 in 1000 part. 2,200.

„ „ toto 1,386.

XXIV horis.

Quant. 1180.

PO^5 2,206.

„ in hor. 91.

D. 20. m. Apr.

Urin. merid.

Qual. urin. clara, acida, col. e rubro flavesc.

Quant. 375. Pond. spec. 1,031 — 1.028.

PO^5 in 1000 part. 2,500.

„ „ toto 937.

Urin. matut.

Qual. urin. clara, acida, col. inter flav. et e flavo rubesc.

Quant. 145. Pond. spec. 1.014.

PO^5 in 1000 part. 2,000.

„ „ toto 290.

Tempore nocturno.

Quant. 1510.

PO^5 1,919.

Urin. nocturn.

a) Tempore vespert. et nocturno.

Qual. urin. nubila, acida, col. inter e flavo rubesc. et e rubro flavesc.

Quant. 790. Pond. spec. 1.014.

PO^5 in 1000 part. 1,700.

„ „ toto 1,343.

b) Tempore matutino.

Qual. urin. clara, acida, col. inter flav. et e flavo rubesc.

Quant. 720. Pond. spec. 1.0069 — 1.014.

PO^5 in 1000 part. 800.

„ „ toto 576.

XXIV horis.

Quant. 2030.

PO^5 3,146.

„ in hor. 131.

D. 21. m. Apr.

Urin. merid.

Qual. urin. clara, alcalina, col. e flavo rubesc.

Quant. 540. Pond. spec. 10.14.

PO^5 in 1000 part. 1,600.

„ „ toto 864.

Urin. matut.

Qual. urin. acida, sedim. acidi urici salium copiosa, percolatione facta nubila, col. e flavo rubesc.

Quant. 165. Pond. spec. 1.031.

PO^5 in 1000 part. 3,800.

„ „ toto 627.

Urin. nocturn.

Qual. urin. clara, acida, color e flavo rubesc.

Quant. 790. Pond. spec. 1.014.

PO^5 in 1000 part. 2,600.

„ „ toto 2,054.

XXIV horis.

Quant. 1495.

PO^5 3,545.

„ in hor. 147.

D. 22. m. Apr.

Urin. merid.

Qual. urin. clara, acida, col. int. flav. et e flavo rubesc.

Quant. 290. Pond. spec. 1.014—1.031.

PO^5 in 1000 part. 3,500.

„ „ toto 1,015.

Urin. matut. vac.

Urin nocturn.

Qual. urin. clara, acida, col. flav.

Quant. 1000. Pond. spec. 1.014.

PO^5 in 1000 part. 1,700.

„ „ toto 1,700.

XXIV. horis.

Quant. 1290.

PO^5 2,715.

„ in horam 113.

D. 23. m. Apr.

Urin. merid. Port. 2.

a) Qual. urin. clara, acida, col. e flavo rubesc.
   Quant. 860. Pond. spec. 1.014.
   PO^5 in 1000 part. 2,000.
   „ „ toto 1,720.

b) Qual. urin. clara, acidula, color. lang. flav.
   Quant. 365. Pond. spec. 1.000.
   PO^5 in 1000 part. 700.
   „ „ toto 255.

Tempore pomeridiano.

Quant. 1225.

PO^5 1,975.

Urin. nocturn.

Qual. urin. acida, levit. nubila, col. int. flav. et e flavo rubesc.

Quant. 820. Pond. spec. 1.014—1.031.

PO^5 in 1000 part. 2,300.

„ „ toto 1,886.

Urin. matut.

Qual. urin. clara, neutra, col. flav.

Quant. 810. Pond. spec. 1.069.

PO^5 in 1000 part. 400.

„ „ toto 324.

XXIV horis.

Quant. 2855.

PO^5 4,185.

„ in horam 174.

D. 24. m. Apr.

Urin. merid.

Qual. urin. clara, acida, col. e flav. rubesc.

Quant. 385. Pond. spec. 1.031.

PO^5 in 1000 part. 3,000.

„ „ toto 1,155.

Urin. matut.

Qual. urin. nubila, acida, col. flav.

Quant. 110. Pond. spec. 1,031.

PO^5 in 1000 part. 2,500.

„ „ toto 275.

Urin. nocturn.

Qual. urin. levit. nubila, acida, col. e rubro flavesc.

Quant. 690. Pond. spec. 1.031.

PO^5 in 1000 part. 2,600.

„ „ toto 1,794.

XXIV horis. Quant. 1185. PO^5 3,224. PO^5 in hor. 134.

D. 25. m. Apr.

Urin. merid.

Qual. urin. clara, acida, color. flav.

Quant. 175. Pond. spec. 1.031.

PO^5 in 1000 part. 2,471.

„ „ toto 102.

Aegrotus B. triginta annos natus, non tam longi, quam robusti corporis refrigeratione rheumatismum acutum sibi contraxerat, qui primum superiores, deinde etiam inferiores extremitates inficiebat. Aegrotus magna quidem febri affectus valde sudabat, sed paullum collabebatur et cibi cupiditate non carebat. Praeter pulsus arteriarum et cordis citatos nihil amplius cognosci poterat, quod indicaret, etiam cor esse affectum. Urina, quae semper erat acida et coloro exaltato, per tredecim dies observabatur. —

D. 5. m. Apr.

Urin. nocturn.

Qual. urin. clara, acida, col. inter e flavo rubesc. et e rubro flavesc.

Quant. 310. Pond. spec. 1019½.

PO^5 in 1000 part. 3,200.

„ „ toto 992.

Urin. matut.

Qual. urin. levit. nubila, acida, col. inter e flavo rubesc. et e rubro flavesc.

Quant. 400. Pond. spec. 1018.

PO^5 in 1000 part. 3,200.

„ „ toto 1,280.

Urin. merid.

Qnal. urin. clara, maxime acida, col. inter flavo rubesc. et rubro flavesc.

Quant. 420. Pond. spec. 1017.

PO^5 in 1000 part. 4,400.

„ „ toto 1,848.

XXIV horis.

Quant. 1130.

PO^5 4,120.

„ in hor. 170.

D. 6. m. Apr.

Urin. nocturn.

Qual. urin. clara, acida, col. inter e flavo rubesc. et e rubro flavesc.

Quant. 450. Pond. spec. 1017.

PO^5 in 1000 part. 3,800.

„ „ toto 1,710.

Urin. matut.

Qual. urin. clara, acida, col. inter e flavo rubesc. et e rubro flavesc.

Quant. 350. Pond. spec. 1017.

PO^5 in 1000 part. 1,400.

„ „ toto 490.

Urin. merid.

Qual. urin. clara, acida, color. e flavo rubesc.

Quant. 410. Pond. spec. 1017.

PO^5 in 1000 part. 2,800.

„ „ toto 1,148.

XXIV horis.

Quant. 1210.

PO^5 3,348.

„ in hor. 139.

D. 7. m. Apr.

Urin. nocturn.

Qual. urin. clara, acida, color. e flavo rubesc.

Quant. 310. Pond. spec. 1019.

PO^5 in 1000 part. 3,400.

„ „ toto 1,054.

Urin. matut.

Qual. urin. levit. nubila, acida, col. inter e flavo rubesc. et e rubro flavesc.

Quant. 450. Pond. spec. 1018½.

PO^5 in 1000 part. 2,100.

„ „ toto 945.

Urin. merid.

Qual. urin. clara, acida, color. e flavo rubesc.

Quant. 250. Pond. spec. 1020.

PO^5 in 1000 part. 5,500.

„ „ toto 1,475.

XXIV horis.

Quant. 1010.

PO^5 3,474.

„ in hor. 144.

D. 8. m. Apr.

Urin. noct.

Qual. urin. levit. nubila, acida, col. e flavo rubesc.

Quant. 810. Pond. spec. 1020.

PO^5 in 1000 part. 2,800.

„ „ toto 2,268.

Urin. matut. vac.

Urin. merid.

Qual. urin. clara, acida, col. inter e flavo rubesc. et e rubro flavesc.

Quant. 260. Pond. spec. 1020.

PO^5 in 1000 part. 3,600.

„ „ toto 1,136.

XXIV horis. Quant. 1070. PO^5 3,404. PO^5 in horam 141.

D. 9. m. Apr.

Urin. nocturn.

Qual. urin. clara, acida, color. e flavo rubesc.

Quant. 750. Pond. spec. 1020.

PO^5 in 1000 part. 3,000.

„ „ toto 2,250.

D. 10. m. Apr.

Urin. nocturn.

Qual. urin. turbida, acida, col. e flavo rubesc.

Quant. 720. Pond. spec. 1020½.

PO^5 in 1000 part. 4,800.

„ „ toto 3,456.

Urin. merid.

Qual. urin. acida, levit. nubila, col. e flavo rubesc.

Quant. 490. Pond. spec. 1020.

PO^5 in 1000 part. 5,000.

„ „ toto 2,450.

XXIV horis. Quant. 1210. PO^5 5,906. PO^5 in hor. 246.

D. 11. m. Apr.

Urin. nocturn.

Qual. urin. clara, acida, col. inter e flavo rubesc. et e rubro flavesc.

Quant. 780. Pond. spec. 1021.

PO^5 in 1000 part. 5,900.

„ „ toto 4,602.

Urin. merid.

Qual. urin. levit. nubila, acida, col. e flavo rubesc.

Quant. 230. Pond. spec. 1024½.

PO^5 in 1000 part. 6,300.

„ „ toto 1,449.

XXIV horis. Quant. 1010. PO^5 6,051. PO^5 in hor. 252.

D. 12. m. Apr.

Urin. nocturn.

Qual. urin. nubila, acida, col. e flavo rubesc.

Quant. 720. Pond. spec. 1,019.

PO^5 in 1000 part. 2,500.

„ „ toto 1,800.

Urin. matut.

Qual. urin. clara, acida, col. e flavo rubesc.

Quant. 190. Pond. spec. 1013.

PO^5 in 1000 part. 1,900.

„ „ toto 190.

Urin. merid.

Qual. urin. clara, acida, col. e flavo rubesc.

Quant. 110. Pond. spec. 1022 ½.

PO^5 in 1000 part. 2,900.

„ „ toto 319.

XXIV horis.

Quant. 1020.

PO^5 2,309.

„ in hor. 96.

D. 13. m. Apr.

Urin. nocturn.

Qual. urin. levit. nubila, acida, col. e flavo rubesc.

Quant. 520. Pond. spec. 1017.

PO^5 in 1000 part. 1,900.

„ „ toto 988.

Urin. matut.

Qual. urin. turbida, acida, col. inter e flavo rubesc. et rubro flavesc.

Quant. 195. Pond. spec. 1021.

PO^5 in 1000 part. 2,800.

„ „ toto 554.

Urin. merid.

Qual. urin. clara, acida, color. e flavo rubesc.

Quant. 270. Pond. spec. 1019.

PO^5 in 1000 part. 3,400.

„ „ toto 918.

XXIV horis.

Quant. 985.

PO^5 2,460.

„ in hor. 102.

D. 14. m. Apr.

Urin. nocturn.

Qual. urin. nubila, acida, col. e flavo rubesc.

Quant. 540. Pond. spec. 1018.

PO^5 in 1000 part. 1,600.

„ „ toto 864.

Urin. merid.

Qual. urin. clara, acida, col. inter e flavo rubesc. et e rubro flavesc.

Quant. 275. Pond. spec. 1023.

PO^5 in 1000 part. 4,200.

„ „ toto 1,155.

XXIV horis. Quant. 815. PO^5 2,019. PO^5 in horam 84.

D. 15. m. Apr.

Urin. nocturn.

Qual. urin. clara, acida, col. e flavo rubesc.

Quant. 600. Pond. spec. 1019.

PO^5 in 1000 part. 2,700.

„ „ toto 1,620.

Urin. matut.

Qual. sedimenta acidi urici salium copiosissima, urin. percolatione facta nubila, acida, col. e flavo rubesc.

Quant. 100. Pond. spec. 1018.

PO^5 in 1000 part. 700.

„ „ toto 70.

Urin. merid.

Qual. urin. clara, acida, col. e flavo rubesc.

Quant. 320. Pond. spec. 1014.

PO^5 in 1000 part. 2,900.

„ „ toto 928.

XXIV horis.

Quant. 1020.

PO^5 2,618.

„ in horam 109.

D. 16. m. Apr.

Urin. nocturn.
Qual. urin. clara, acida, col. e flavo rubesc.
Quant. 350. Pond. spec. 1017.
PO^5 in 1000 part. 2,800.
„ „ toto 980.

Urin. matut.
Qual. urin. clara, acida, col. e rubro flavesc.
Quant. 260. Pond. spec. 1017.
PO^5 in 1000 part. 3,200.
„ „ toto 832.

Urin. merid.
Qual. urin. clara, acida, col. e rubro flavesc.
Quant. 150. Pond. spec. 1021 ½.
PO^5 in 1000 part. 5,800.
„ „ toto 870.

XXIV horis.
Quant. 760.
PO^5 2,682.
„ in horam 111.

D. 17. m. Apr.

Urin. nocturn.
Qual. urin. nubila, acida, col. e rubro flavesc.
Quant. 340. Pond. spec. 1.031.
PO^5 in 1000 part. 2,700.
„ „ toto 918.

Urin. matut.
Qual. urin. nubila, acida, col. e flavo rubesc.
Quant. 200. Pond. spec. 1.031.
PO^5 in 1000 part. 2,500.
„ „ toto 500.

XXIV horis. Quant. 540. PO^5 1,418. PO^5 in horam 59.

Quo planior fiat conspectus illorum observationum et faciliores inde deducendae conclusiones, primum media, maxima, minima diversarum quantitatum urinae ab illis personis secretae, tum numeros Acidi phosphorici iisdem urinis contenti, denique conspectum physiologicarum per decursum totius observationum seriei acidi phosphorici fluctuationum addo ac postremo loco elenchum de auctu acidi phosphorici post usum natri phosphorici pono. In his compositionibus illa quoque divisio urinae in matutinam, meridianam, nocturnam locum tenet.

I. Quantitas urinae *).

a) Urina matutina.

	Ha. 24 dies.	K. 13 dies.	Hi. 11 dies.	Hei. 10 dies.	B. 8 dies.
Medium	471	154	434	384	268
Maxim.	1120	250	900	900	450
Minim.	125	40	100	100	100

*) Mensura urinae quantitatis Ccm. facta est.

b) Urina meridiana.

	Ha. 22 dies.	K. 19 dies.	Hi. 12 dies.	Hei. 12 dies.	B. 11 dies.
Medium	411	242	510	413	289
Maxim.	985	625	880	1225	490
Minim.	210	100	100	120	110

c) Urina nocturna.

	Ha. 24 dies.	K. 21 dies.	Hi. 11 dies.	Hei. 11 dies.	B. 13 dies.
Medium	406	892	1026	884	554
Maxim.	2700	1650	2700	1830	810
Minim.	320	465	445	400	310

d) Urina XXIV horar.

	Ha. 23 dies.	K. 23 dies.	Hi. 11 dies.	Hei. 11 dies.	B. 12 dies.
Medium	1643	1272	2054	1669	981
Maxim.	4550	1990	3700	2855	1210
Minim.	960	690	760	1165	540

II. Acidum phosphoricum *).

a) Urina matutina.

	Ha. 24 dies.	K. 13 dies.	Hi. 11 dies.	Hei. 10 dies.	B. 8 dies.
Medium	639	275	288	276	608
Maxim.	1,298	621	630	627	1,280
Minim.	289	76	66	106	70

b) Urina meridiana.

	Ha. 22 dies.	K. 19 dies.	Hi. 12 dies.	Hei. 12 dies.	B. 11 dies.
Medium	864	469	491	686	1,245
Maxim.	1,547	952	990	1,975	2,450
Minim.	405	120	20	102	319

c) Urina nocturna.

	Ha. 24 dies.	K. 22 dies.	Hi. 11 dies.	Hei. 11 dies.	B. 13 dies.
Medium	2,745	1,184	1,624	1,837	1,807
Maxim.	4,140	1,817	2,340	2,280	4,602
Minim.	2,015	738	691	1,207	864

*) Acid. phosphor. Grm. computatum est.

d) Urina XXIV horar.

	Ha. 23 dies.	K. 23 dies.	Hi. 11 dies.	Hei. 11 dies.	B. 12 dies.
Medium	4,218	1,997	2,501	2,738	3,317
Maxim.	5,588	3,508	3,806	4,185	6,051
Minim.	3,113	1,364	1,790	1,875	1,418

e) Urina unius horae.

	Ha. 23 dies.	K. 23 dies.	Hi. 11 dies.	Hei. 11 dies.	B. 12 dies.
Medium	175	78	103	112	137
Maxim.	232	146	158	174	252
Minim.	129	56	74	78	59

III. Tabula fluctuationum acidi phosphorici physiologicarum.

a) Urina ipsius mea XXIV dierum *).

Urina matut.	Urin. meridian.	Urin. nocturn.	Urin. XXIV horar.	Urin. singul. horarum.
2,100	2,650	5,900	5,085	211
2,600	2,200	3,800	5,212	217
1,350	1,900	6,900	3,749	156
3,850	2,600	6,900	5,588	232
2,600	2,566	3,800	5,388	244
2,300	—	2,900	3,295	137
1,150	2,500	3,500	3,870	161
1,400	1,467	4,500	3,879	161
1,750	3,200	4,200	3,996	166
950	2,933	5,400	3,113	129
2,066	1,100	6,700	3,119	129
2,300	2,200	2,300	3,142	131
2,250	2,733	2,500	4,475	186
1,466	2,500	4,200	3,978	165
966	1,656	2,900	3,744	156
800	1,533	3,000	3,337	139
600	1,093	1,100	4,449	185
3,533	3,000	3,500	4,428	184
1,650	2,166	2,300	4,012	167
760	2,300	6,900	4,752	198
3,233	—	3,200	—	—
3,066	5,333	3,100	4,860	202
833	1,733	3,100	4,751	197
1,566	2,283	6,300	4,817	200

*) Acidum phosphoricum urinae tempor. matut. merid. et nocturn. 1000 part. compatatum est.

Urina aegroti K. XXII dierum.

Urina matut.	Urin. meridian.	Urin. nocturn.	Urin. XXIV horar.	Urin. singul. horar.
	1,700	900	3,508	146
	3,400	3,000	2,970	123
	1,500	900	2,908	121
3,400	2,500	1,100	1,825	76
	1,700	1,300	2,126	88
	1,700	1,300	1,794	74
	3,400	2,100	1,543	64
1,100	2,900	1,500	1,530	63
1,100	2,200	1,700	1,975	82
2,800	1,400	1,100	2,041	85
1,100	1,900	1,300	2,058	85
1,100	2,000	800	1,893	78
2,700	800	900	1,708	71
2,200	—	1,600	1,870	77
1,900	3,600	1,300	1,904	79
1,900	3,500	2,000	1,479	61
1,400	2,700	2,000	1,635	68
2,300	1,400	1,000	1,705	71
1,300	1,100	1,300	1,364	56
	2,200		1,655	68
			1,762	73
			2,149	89

c) Urina aegroti Hi. XI dierum.

Urina matut.	Urin. meridian.	Urin. nocturn.	Urin. XXIV horar.	Urin. singul. horarum.
2,000	3,000	3,600	2,147	89
150	3,300	2,200	2,232	93
300	200	2,200	1,790	74
3,000	1,000	1,500	2,800	116
1,000	2,000	2,600	2,120	88
300	700	1,300	1,983	82
500	700	466	1,904	79
1,300	800	3,800	2,675	110
1,400	4,500	2,600	3,806	158
500	500	2,900	2,789	116
700	800	2,200	3,266	136
	700			

d) Urina aegroti Hei. XI dierum.

Urina matut.	Urin. meridian.	Urin. nocturn.	Urin. XXIV horar.	Urin. singul. horarum.
400	200	5,700	2,568	107
200	2,500	1,150	2,667	111
900	2,100	2,000	1,991	82
200	1,600	1,700	1,875	78
500	1,300	2,300	1,992	83
1,900	1,400	2,200	2,206	91
2,000	2,500	1,250	3,146	131
3,800	1,600	2,600	3,545	147
—	3,500	1,700	2,715	113
400	1,350	2,300	4,185	174
2,500	3,000	2,600	3,224	134
	2,400			

e) Urina aegroti B. X. dierum.

Urina matut.	Urin. meridian.	Urin. nocturn.	Urin. XXIV horar.	Urin. singul. horarum.
2,100	5,500	3,400	3,474	144
—	3,600	2,800	3,404	141
	—	3,000	—	—
	5,000	4,800	5,906	246
	6,300	5,900	6,051	252
1,000	2,900	2,500	2,309	96
2,800	3,400	1,900	2,460	102
—	4,200	1,600	2,019	84
700	2,900	2,700	2,618	109
9,200	5,800	2,800	2,682	111
2,500	—	2,700	1,418	59

Compositio differentiarum.

Nomen.	Dies.	Urin. matut.	Urin. meridian.	Urin. nocturn.	XXIV horis.	hora una.
		à 1000 part.				
H.	Differentiae XXIV dier.	3,250	4,240	5,800	2,475	115
K.	Differentiae XXII dier.	2,300	2,800	2,200	2,144	90
Hi.	Differentiae XI dier.	2,850	4,300	3,334	2,016	84
Hei.	Differentiae XI dier.	3,600	3,300	4,550	2,310	96
B.	Differentiae X dier.	2,300	3,400	4,300	5,633	193

IV. Tabula auctus acidi phosph

$_2NaO$ $HOPO_5$	Urin. matut. PO_5 in 1000 part.	PO_5 in toto	Tempus usque ad auctum	$_2NaO$ $HOPO_5$	Urin. mer PO_5 in 1000 part.	PO_5 in toto
	80				1,90	708
40 Mlgr.	80	304		60	1,40	
					1,30	
	60				90	
100 Mlgr.	70	530	3 hor.	80	80	946
	50				1,40	
	4,10					
100 Mlgr.	2,40	838	$3^1/_2$ hor.		3,00	720
	4,10					
	2,60				2,70	
	50				1,90	944
100 Mlgr.	70	699			1,90	
	1,10					
	1,10					
	1,30		2 hor.			
	1,30	946		232	2,30	
	70				2,30	690
120 Mlgr.	1,10		3 hor.			
	20					
	50	892				
	5,10		3 hor.			
928 Mlgr.	2,30					
	2,30					
638	2,70			638	6,90	
	2,70	1,298			4,70	1,547
	3,80		3 hor.		4,40	
				5,00	1,40	
					2,00	
					1,86	1,286
	1,20	505				
	30					
	1,00					
				5,00	3,00	
					1,70	1,301
		5,30			1,00	
		60			2,10	
		60			2,80	
		80			3,10	
		1,00				
		1,30				

post usum Natri phosphorici.

mpus ue ad ctum	$_2NaO$ $HOPO_5$	Urin. noct. PO_5 in 1000 part.	PO_5 in toto	PO_5 XXIV dier.	PO_5 singul. horae	Dies.
	20	2,90	2,320			Apr. 18
	80	3,00	2,325	3,337	139	- 19.
hor.		1,10	2,970	4,449	185	- 20.
	80	3,50	2,870	4,428	184	- 21.
	120	2,30	2,369	4,012	167	- 22.
hor	1,044	6,90	3,116	4,752	198	- 23.
	928	3,20	3,520	–	--	- 24.
hor.	290	3,10	2,015	4,869	202	- 25.
2 hor.		3,10	2,635	4,751	197	- 26.
1/2 hor.		6,30	2,938	4,817	200	- 27.

Ex factis observationibus, habita ratione distributionis urinae in matutinam, meridianam, nocturnam, hae conclusiones procedunt.

Primum quod ad quantitatem urinae attinet, ea quidem nimium obnoxia est momentis singularibus et externis, quam ut sub certam aliquam normam redigi possit. Verumtamen ex inquisitionibus in quinque diversis personis a me institutis satis constanter apparuit, in universum maximum quantitatum quotidianae urinae nocturnis horis secerni medium postmeridianis, minimum matutinis. Porro compertum est, ex aucta potione quantitatem urinae valde increscere, medium tempus faciendae urinae, nisi vi quadam retineatur, esse horae vel sesquihorae spatium, et auctam secretionem per horas tres vel quatuor durare, deinde ad solitum modum redire. In diaeta supra exposita ego non aucta potione per tempus antemeridianum medio numero ter urinam reddo, hora sexta quum surgo, inter horam nonam et decimam et sub primam meridianam; per tempus postmeridianum et vespertinum quater, sub tertiam, sextam, inter octavam et nonam et antequam in lectum decumbo ante undecimam. Parcissimam quantitatem constanter matutinis horis inter alvi evacuationem reddo.

Tum de quantitatibus Acidi phosphorici per singulos dies et horas in urina excretis, quae ego observavi congrua sunt iis, quae Dr. J. Vogel, Mosler, Winter, alii viderunt. Maxima quantitas Acidi phosphorici in urinis viginti quatuor horarum in longa serie observationum in quinque personis factarum fuit grammatum 3,508 — 6,051, in singulas horas mgr. 146 — 252. Media quantitas in viginti quatuor horas cadit grammatum 2,900, in singulas mgr. 120. Secretio Acidi phosphorici per singulas horas ubique admodum aequalis reperta est. Secundum divisionem temporis a nobis factam maximum secretionis Acidi phosphorici noctis erat, medium horarum pomeridianarum, minimum matutinarum. Quum autem vespertinam urinam cum nocturna junxerim, ex singulis tamen experimentis in vespertina maximam quantitatem Acidi phosphorici cognoverim, inde apparet, id quod jam Dr. J. Vogel, Winter, Mosler repererunt, Acidum, phosphoricum viginti quatuor horarum vesperi ad maximum pervenire. Si ex omnibus urinis a me exploratis mediam quantitatem Acidi phosphorici certis diei temporibus secreti quaerimus, inveniuntur in urina

matutina 417 mgrm. PO^5
meridiana 751 „ „
nocturna 1,839 grm.

Porro vino, cerevisia, similibus Acidum phosphoricum in urina non multo augetur. In me ipso observavi, eam proximis tantum duabus tribusve horis augeri, deinde ad normam suam reverti. Quamvis sit exigium incrementum Acidi phosphorici in urina ex aucta potione, majus tamen est, quam pro quantitate salium phosphoricorum cerevisia vel aqua (in qua quidem nullum omnino Acidum phosphoricum reperi) in organismum ingestorum. Ea res, si consideramus, Ureae quoque et Chlori excretionem copiosa potione adaugeri, haud dubio documento esse videatur, incrementum Acidi phosphorici ex aucta potione aut in directa incitatione universalis transubstantiationis, aut in stimulatione excretoriae actionis renum causam habere. Plurimum autem Acidum phosphoricum in urina

augetur talibus substantiis, in quibus omnino Acidum phosphoricum copiosius inest; ut praecipue alimentis copiosis, proteinam multam continentibus, et merorum salium phosphoricorum usu. Sic post coenam principalem Acidum phosphoricum manifesto et constanter adauctum observatur. Exiguae quantitates substantiarum Acidum phosphoricum continentium conspicuum incrementum Acidi phosphorici in urina non efficiunt, sed majores jam post duas tresve horas, et quidem media ratio incrementi est 2. Pares quantitates substantiarum Acidum phosphoricum continentium ob differentem propensionem organismi ad intestinum usum Acidi phosphorici non trahunt paria incrementa Acidi phosphorici urina excreti. Sic etiam post usum parvarum quantitatum $_2NaOHOPO_5$ saepe copiosius apparuit Acidum phosphoricum in urina, quam post majorum quantitatum consumtionem, quod est alterum documentum quo persuadeatur, excretionem Acidi phosphorici per transubstantiationem pro copia Acidi phosphorici organismo contenta temperari.

Post usum Natri phosphorici quantitas Acidi phosphorici viginti quatuor horis excreta, quae adhuc constans fuerat, ex 3,000 grammatis in 4,000 et 4,800 aucta est, eamque copiam servavit donec usus Natri phosphorici continuabatur. Ita Aubert [18]) quoque reperit, quantitatem Acidi phosphorici urina evacuati, quae ex norma erat grammatum 2,8, sumtis Natri phosphorici grammatis triginta uno augeri in grammata 4,1. Doses Natri phosphorici differentes ab uno grammate ad 5,000 mihi eandem quantitatem Acidi phosphorici in urina viginti quatuor, horarum praestiterunt. Acidum phosphoricum in matutina urina inter usum Natri phosphorici auctum est ex grammatis 300 in 1,200, meridiana ex 600 in 1,500, nocturna ex 2,300 in 3,500, in urina viginti quatuor horarum ex 3,300 gr. in 4,800, in urina unius horae ex 139 mgr. in 202. (Vide tab. IV.)

Si quantitates Acidi phosphorici in diversis urinis longioribus observationibus repertae comparantur, quemadmodum ego feci tab. III., ubi quantitas Acidi phosphorici ex millenis partibus indicata est: facile intelligitur, physiologicas fluctuationes et in sanis et in aegrotis hominibus eximia esse magnitudine. De his fluctuationibus jam Dr. Neubauer, J. Vogel, alii admonuerunt. Sic Neubauer in uno homine vidit:

	max.	diei	2,16	—	min.	1,21
in alio	„	„	4,88	—	„	2,42
Mosler observavit	„	„	4,86	—	„	2,40
J. Vogel	„	hor.	0,216	—	„	0,085.

In mea urina dierum viginti quatuor, quantitate Acidi phosphorici, ut jam notatum est, ex millenis partibus calculata, matutina differentia apparuit grammatum 3,250, meridiana 4,240, nocturna 5,800; urinae unius diei diversae fuerunt grammatis 2,400 urinae unius horae mgrm. 115. (Vide physiologicas differentias in aegrotis in tab. III. Compositio differentiarum). Ex differentiis quantitatum Acidi phosphorici (calculatarum e millenis partibus) in urinis quinque diversarum personarum conatus media, quatenus id fieri posset, eruere,

18) Henle u. Pfeufer's Zeitschr. f. rationale Medicin. 1852. II. 3.

reperi media physiologicarum fluctuationum in matutina urina 2,800 grm., in meridiana 3,600, in nocturna 4,000, in urina viginti quatuor horarum 2,900 grm. et in urina unius horae 115 mgrm. Unde apparet, physiologicas fluctuationes in universum maximas esse in nocturnis vel vespertinis urinis. Etiam observavi pariter ac fecit Dr. J. Vogel, post auctam secretionem Acidi phosphorici eximiam imminutionem succedere posse. Ita praeter alias manifestas imminutiones maximam praecipue in aegroto B. animadverti. Urina unius noctis continuit Acidi phosphorici 4,602 grm., alterius proximae 1,800; una urina meridiana 1,449, altera 319; urina unius diei 6,051, alterius 2,309 grm.; in singulas horas 252 et 96 mgrm. (Vide explorationes urinae B. April. 9 — 12).

Denique de quantitate Acidi phosphorici in urina aegrotorum observationes feci in pyaemico K., in duobus febri intermittenti laborantibus Hi et Hei, et in aegrotante rheumatismo acuto B. Acidum phosphoricum in matutinis urinis omnium aegrotorum parcius erat quam in mea, apud illos media quantitas observabatur 361, apud me 639 mgrm. (v. tab. II.); in meridiana urina aegroti B. Acidum phosphoricum copiosius (1,245 grm.) erat quam in mea (864 mgrm.); reliquorum aegrotorum medius numerus erat 548, ut essent eorum urinae 316 millegrammatis pauperiores Acido phosphorico quam mea. Nocturnae urinae omnium aegrotorum in medio minus Acidi phosphorici habebant quam mea: illarum numerus erat 1,613, hujus 2,745; aegrotorum urinae igitur Acidi phosphorici minus habebant 1,132 grm. Quantitas Acidi phosphorici in urina viginti quatuor horarum omnibus aegrotis pariter minor erat quam mihi, et quidem grammate 1,580; solummodo maximum quantitatis Acidi phosphorici in urina viginti quatuor horarum aegroti B. superabat maximum meae urinae 463 millegrammatis; pariter maximum unius horae in illius urinae majus erat maximo meo 20 millegrammatis. In medio secretionis per unam horam quantitas Acidi phosphorici cunctorum aegrotorum 70 millegrammatis minor erat mea. Unde jure colligitur, in morbis illis quantitatem Acidi phosphorici urina excretam media ratione omnino minorem esse quam in statu sano.

Jam si secundum tab. II. singulas quantitates Acidi phosphorici in eorundem aegrotorum urinis inter se comparamus, in omnibus urinis Hi et Hei majorem quantitatem Acidi phosphorici videmus quam in urinis K.; et si ex cunctis quantitatibus Acidi phosphorici in urinis aegrotorum Hi et Hei media trahimus (282, 589, 1,731, 2,619, 102), apparet quantitatem Acidi phosphorici in aegroto B. ubique majorem esse quam in Hi et Hei. Jam quum B., Hi et Hei acutis malis laborent, K. vero chronico: sententia, quam F. Mosler protulit, in omnibus acutis malis Acidum phosphoricum imminutum, in chronicis omnibus adauctum esse, his exemplis reprobata est.

Adhuc quaedam observationes de fluctuatione quantitatis Acidi phosphorici in aegrotis memorandae sunt. Explorationes urinarum utriusque aegroti febri intermitttenti laborantis, Hi et Hei, inter unam quamque pyrexiam non mediocrem minutionem Acidi phosphorici ostenderunt, paulatim tantum resurgentem post decursum pyrexiae. Pyrexiae utriusque aegroti matutinae erant et quotidianae. Post decursum pyrexia-

rum Acidum phosphoricum per horas antemeridianas media ratione uno grammate adaugebatur, idque incrementum usque sub tempus pomeridianum continuabatur. Etiam in imperfectis pyrexiis decrementum Acidi phosphorici facile animadvertebatur, quasi si inter contensionem organismi, qua collectam materiam nocivam expellere niteretur, Acidum phosphoricum ligatum retineretur. Atque quum in utroque aegroto in perfectis et in imperfectis pyrexiis paene idem decrementum Acidi phosphorici observaretur, satis probabiliter colligitur, omnino in pyrexiis febrium intermittentium quantitatem Acidi phosphorici in urina deprimi in minimam portionem.

Transeamus ad Acidum phosphoricum excrementis contentum et ad gravem hanc quaestionem, urina an faecibus plus Acidi phosphorici excernatur. De quantitate Acidi phosphorici in excrementis omnino unde viginti experimenta instituta sunt, et quidem septendecim in meis, duo in aegroti K. excrementis. Considerantes proximam tab. V., in qua inquisitiones de quantitate Acidi phosphorici in faecibus compositas habemus, in omnibus undeviginti observationibus colores colatarum solutionum secundum eas determinationes, quas Ill. J. Vogel in scala sua urochromatica usurpavit, inter fulvum et rubrum versari videmus. Jam etiamsi nondum exstet tantus numerus observationum, per quem certas conclusiones ducere liceat, magna tamen cum veritatis specie colligi potest, colores colatarum excrementorum solutionum prope accedere ad colores exaltatarum urinarum, et tantummodo excrementa admodum aquosa, diarrhoica, aut faeces admixtis materiis pathologicis, alios quoque colores sumere. Ex coloribus re vera mixtis faecium intactarum haud quaquam -- de qua re saepius experientia certiorem me fecit — aliqua probabilitas elucet cognoscendi coloris fundamentalis. Sic ex. g. una sedes aegroti K. intacta colorem exhibuit tam floride luteum subvirescentum ut est in gummi guttae, unde protinus colligere posse mihi videbar, colorem fundamentalem in hoc casu infra fulvum scalae futurum; et tamen post colationem, mixta antea solutione Acido nitrico nullum colorem habente, verus color fundamentalis apparuit fulvus. Pariter de quibusdam meorum excrementorum opinio me fefellit; quae quum intacta colorem admodum pullum exhiberent, post colationem colores fundamentales, non ut ego exspectaveram ad minimum rubri, sed fulvi vel paulo altiores apparuerunt.

Si quis mediam rationem quotidianae quantitatis excrementorum constitueret, certe vix posset indicare, quam legem aut quam normam ea in re secutus esset. Quamquam enim certissimum est, hanc quoque excretionem legibus transubstantiationis temperari, non tamen mihi in animum potest venire, medium, maximum, minimum excrementorum quotidie evacuatorum determinare, quoniam primum nulla est lex de quantitate aquae excrementis solutionis causa admiscendae, ac deinde exacta determinatio quantitatis non e mensura, sed ex pondere excrementorum immixtorum fieri debet. Facere tamen non possum quin hoc loco admoneam, quanti ut facienda ad illustrandam ulterius transubstantiationem exacta pensura materiarum et in corpus ingestarum et ex eo per sedes egestarum.

Convenienter conspectui de mediis, maximis, minimis quantitatis Acidi phosphorici in urinis proposito in subsequente tab. V. media, maxima, minima quantitatum Acidi phosphorici per dies et per horas excrementis contenti ex factis ea de materia experimentis computavi, et simul cum mediis, maximis, minimis quantitatum Acidi phosphoricae in urina obvii eadem composui.

Jam si fit comparatio numerorum quantitates Acidi phosphorici in excrementis et in urinis indicantium, statim elucet, quantitatem Acidi phosphorici in excrementis multo minorem esse quam in urinis, sive per dies, sive per horas digesta fuerit ratio. Media quantitas Acidi phosphorici viginti quatuor horis per excrementa egesti ex septemdecim experimentis calculata sunt 666 mgrm., maxima 1,080, minima 270, quibus numeris respondent per singulas horas egesta in excrementis mgrm. 27, 45 et 11 Acidi phosphorici. Si igitur ex omnibus urinis examinatis medium quantitatum Acidi phosphorici viginti quatuor horis excreti sumitur, et inde medium quantitatum Acidi phosphorici excrementis contenti deducitur, media differentia utrarumque quantitatum Acidi phosphorici habet 2,288 grm.; differentia horarum constituitur 92 mgrmmis. Differentia maximorum urinae et excrementorum complectitur 3,547 grm., differentia minimorum 1,642 grm. per viginti quatuor horas. His rursum respondent differentiae quantitatum in singulas horas cadentium: maximorum 147 mgrm., minimorum 68.

Quum omnia experimenta accuratissime et scrupulose sint tractata, certo concludere mihi fas est, maximam partem Acidi phosphorici ex organismo excernendi cadere in secretionem urinae, et maximam partem salium phosphoricorum in corpus pervenientinm resorberi. Si porro inter se comparantur singuli numeri quantitates Acidi phosphorici per dies et per horas in excrementis egesti indicantes, inde apparet, exiguis quantitatibus sumti Natri phosphorici quantitatem Acidi phosphorici non manifesto augeri, majoribus levia tantum incrementa addi; aequatas doses Natri phosphorici inaequales effectus habere, et parvis dosibus quantitatem Acidi phosphorici in faecibus plus saepe augeri quam majoribus.

V. Observationes acidi excrementorum phosphorici.

a) Ha. 19. Observat.

D. 6.—7. m. Apr. hor. 9. temp. matut.
Col. faecium e rubro flavesc.
Quant. 840 c. aqua.
PO^5 in 1000 part. 450.
„ „ toto 378.
„ „ horam 15.

D. 7.—9. m. Apr. hor. 9. temp. matut.
Col. e rubro flavesc.
Quant. 800.
PO^5 in 1000 part. 2,050.
„ „ toto 1,640.
„ XXIV hor. 820.
„ in horam 34.

D. 9. — 12. m. Apr. hor. 9. temp. matut.
Col. e flavo rubesc.
Quant. 800.
PO^5 in 1000 part. 1,800.
„ „ toto 1,440.
„ XXIV horis 720.
„ in horam 30.

D. 12. — 13. m. Apr. hor. 10. temp. matut.
Col. ruber Quant. 900.
PO^5 in 1000 part. 1,200.
„ „ toto 1,080.
„ „ horam 45.

D. 13. — 15. m. Apr. hor. 9. temp. matut.
Col. e flavo rubesc. Quant. 1150.
PO^5 in 1000 part. 1,150.
„ „ toto 1,322.
„ XXIV horis 661.
„ in horam 27.

D. 15. — 17. m. Apr. hor. ½ 9. temp. matut.
Col. e flavo rubesc. Quant. 960.
PO^5 in 1000 part. 1,450.
„ „ toto 1,392.
„ XXIV horis 696.
„ in horam 29.

D. 18. m. Apr. hor. ½ 10. temp. matut.
Col. e flavo rubesc. Quant. 860.
PO^5 in 1000 part. 550.
„ „ toto 473.
„ „ horam 19.

D. 18. — 20. m. Apr. hor. ½ 10. temp. mat. ab hac die natro phosphorico usus sum.
Col. e rubro flavesc. Quant. 1300.
PO^5 in 1000 part. 1,100.
„ „ toto 1,430.
„ XXIV horis 715.
„ in horam 29.

D. 20. — 22. m. Apr. hor. ½ 9. temp. matut.
Col. e rubro flavesc. Quant. 1180.
PO^5 in 1000 part. 1,300.
„ „ toto 1,534.
„ XXIV horis 767.
„ in horam 31.

D. 23. m. Apr. hor. ½ 9. temp. matut.
Col. inter e rubro flavesc. et rubr.
Quant. 800.
PO^5 in 1000 part. 400.
„ „ toto 320.
„ „ horam 13.

D. 24. m. Apr. hor. 9.
Col. ruber; Quant. 930.
PO^5 in 1000 part. 750.
„ „ toto 697.
„ „ horam 29.

D. 25. m. Apr. hor. 9.
Col. ruber; Quant. 760.
PO^5 in 1000 part. 700.
„ „ toto 532.
„ „ horam 22.

D. 26. m. Apr. hor. 9.
Col. inter e rubro flavesc. et rubr.
Quant. 870.
PO^5 in 1000 part. 400.
„ „ toto 348.
„ „ horam 14.

D. 27. m. Apr. hor. 9.
Col. inter e flavo rubesc. et e rubro flavesc.
Quant. 900.
PO^5 in 1000 part. 300.
„ „ toto 270.
„ „ horam 11.

D. 28. m. Apr. hor. 2. temp. merid.

Col. e rubro flavesc.; Quant. 900.
PO^5 in 1000 part. 1,000.
„ „ toto 900.
„ „ horam 37.

D. 28.—30. m. Apr. hor. 7. temp. matut.

Color ruber; Quant. 1200.
PO^5 in 1000 part. 1600.
„ „ toto 1,920.
„ XXIV horis 960.
„ in horam 40.

D. 1. m. Maj. hor. ½9 temp. matut.
Col. inter e rubro flavesc. et rubr.
Quant. 1000.
PO^5 in 1000 part. 1,000.
„ „ toto 1,000.
„ „ horam 41.

b) K. 2. Observation.

Faec. XXIV horar.

Col. inter e rubro flavesc. et rubr.
Quant. 730.
PO^5 in 1000 part. 850.
„ „ toto 620.
„ in horam 25.

Faec. XLVIII horar.

Col. e flavo rubesc.
Quant. 630.
PO^5 in 1000 part. 2,850.
„ „ toto 1,795.
„ XXIV horis 897.
„ in horam 37.

Comparatio urinae et excrementorum acidi phosphorici.

	Acid. phosphor. excrementor. XXIV horar.	Acid. phosphor. urin. XXIV horar.					Media acidi phosphor. omnium urin.
	Observat. 17 dier.	Ha. 23 dies	K. 23 dies	Hi. 11 dies	Hei. 11 dies	B. 12 dies	
Medium	666	4,218	1,997	2,501	2,738	3,317	2,954
Maxim.	1,080	5,588	3,508	3,806	4,185	6,051	4,627
Minim.	270	3,113	1,364	1,790	1,875	1,418	1,912

	Acid. phosphor. excrementor. unius horae	Acidum phosphoricum urin. un. hor.					Media acidi phosphor. omnium urin.
	Observat. 17 dier.	Ha. 23 dies	K. 23 dies	Hi. 11 dies	Hei. 11 dies	B. 12 dies	
Medium	27	175	78	103	102	137	119
Maxim.	45	232	146	158	174	252	192
Minim.	11	129	56	74	78	59	79

VITA.

Augustus Hugo ab Haxthausen, confessioni addictus evangelicae, natus sum die XXVII. m. Aprilis, a. MDCCCXXXIII in pago quodam ad Nissam sito, cui nomen est Rennersdorf, patre Joanne Ludovico, qui illo tempore erat a consiliis aulicis, matre Sophia Augusta e gente Fischer, quos hucusque vivos pio animo veneror. Nonnullis annis postquam natus sum, pater, consiliator et socius collegii medici regii designatus, domicilium Monasterium transmovit, ubi primis litterarum elementis instructus sum. Anno 1848 pater in collegium regiminis supremi Arnsbergensis vocatus est, qua in urbe ab infima classe Laurentianum frequentavi, quumque anno 1855 maturitatis testimonio ornatus essem, in academiam regiam medico-chirurgicam militarem transii, quae floret sub directore Ill. Elsholz. Die XXIII. m. Novembris civium academicorum numero a decano V. Ill. C. G. Mitscherlich adscriptus, lectiones has audivi: Ill. V. V. Dove, physic. et meteorologiam; Werder, psychologiam et logicen; Lichtenstein, zoolog.; Al. Braun, botan.; Weiss, mineralogiam; Mitscherlich, chemiam organicam et anorganicam, pharmaciam; Schlemm, osteologiam, syndesmologiam; J. Müller, histologiam, anatomiam, physiologiam, anatomiam comparatam; Schlemm et J. Müller, artem cadavera dissecandi; Mitscherlich, materiam medicam, artem medicas formulas conscribendi, de excitantibus; Schultz-Schultzenstein, encyclopaediam et methodologiam medicinae artis, pathologiam generalem; Laurer, pathologiam et therapiam generalem, semiotic.; Troschel, de fasciis rite applicandis et de fracturis et luxationibus; Jüngken, chirurgiam generalem et specialem, de vulneribus; Virchow, anatomiam pathologic. et microscop.; Traube, auscultationem et percussionem; Boehm, aciurgiam, de morbis dentium, de tenotomia; Romberg, pathologiae specialis partem; Casper, medicinam forens.; de Baerensprung, morbos venereos et cutis. Clinicen frequentavi Ill. Langenbeck. —

Anno 1858 ex academia regia militari auctore patre dimissus, Gryphiswaldiam me contuli, ubi per spatium semestre his scholis interfui: Ill. F. Niemeyer, de morbis organ. respiration. et circulation., de morbis organ. uropoët; Ill. Bardeleben, de chirurgia speciali, de instrumentis chirurgicis; Ill. Eichstedt, de arte obstetricia; doctiss. Ziemssen de morbis cutis et venereis. Scholis clinicis interfui Ill. Niemeyer, Ill. Bardeleben. —

Spatio semestri illo finito propter patris morbum domum reversus sum. Paulo post bellum in Italia commotum erat, quo tempore periculoso etiam nostra patria arma paravit. Ad rogationem meam, num locus medici auxiliarii examinibus non absolutis in me posset transferri, in hac functione in regio valetudinario castrensi septimo institutus, a doctissim. Geisler juratus sum, cui illo tempore regimen erat valetudinarii. Bello finito domum redux, studiis meis incubui, unde mox spatio semestri hibernali ineunte Halas Saxonum me contuli, ubi lectiones has audivi; Ill. Blasius, chirurg. et univers. et special., de fractur. et luxat.; Ill. Vogel, de patholog. et therap. spec.

Scholis clinicis interfui chirurgicis et ophthalmiatricis Ill. Blasius, obstetriciis Ill. Hohl, medicis Ill. Vogel.

Quibus omnibus viris optime de me meritis gratias quam maximas habeo semperque habebo.

THESES.

I.

Photophobia non organicis retinae commutationibus exsistit, sed nervorum ciliarium irritatione.

II.

Nulla alia, nisi humeri fractura Pseudarthrosis facilius oritur.

III.

Pyaemia quasi externa, purulenta diathesis nominata, exsistit.

IV.

Rigor mortis non ultima quadam musculorum contractilitate, sed chemica mortuorum musculorum commutatione provocatur, qua durescunt, priusquam putrescunt.